Academic Program Review

Coordinating Board for Higher Education

Missouri Department of Higher Education

February 2011

TABLE OF CONTENTS

Executive Summary

Academic Program Review

Institution Reports
    Four-year sector

    Two-year sector

Appendices

Statewide Academic Program Review

Executive Summary

At Governor Nixon's request and with the approval of the Coordinating Board for Higher Education (CBHE), the Missouri Department of Higher Education (MDHE) undertook a review of the complete academic program inventory at each of the state's four-year and two-year public institutions of higher education. MDHE staff conducted the review between September 2010 and January 2011 according to a methodology developed by the MDHE in consultation with the chief academic officers of both the two-year and four-year sectors. The methodology was based on existing CBHE policy but modified to meet the specific direction suggested by the governor and time and resource constraints.

The MDHE reviewed degree completions for all academic programs, and flagged for further review those programs whose average annual number of graduates over the past three years fell below a certain threshold. (A full description of the methodology is attached as Appendix D).

Four-year Institutions

As a result of this academic program review, four-year institutions deleted 73 programs, or 18 percent of the programs that MDHE identified for review. In ten instances the institutions intend to propose a single new program that effectively replaces two or more deleted programs. The institutions also moved eight programs to inactive status. (See Table 1.1)

The MDHE examined a total of 438 programs within the four-year sector. Forty-seven programs were set aside, either because they had been approved within the past five years and lacked sufficient time to demonstrate viability, or they had data that had been misreported or miscoded. The MDHE accepted the justifications for maintaining the remaining programs, but recommends that 158 of those programs undergo a follow-up evaluation in three years.

Two-year Institutions

As a result of this academic program review, two-year institutions identified 46 programs for deletion, or 23.5 percent of the programs that MDHE identified for review. The institutions moved another 16 programs to inactive status. (See Table 1.2)

The MDHE examined a total of 262 programs within the two-year sector. Sixty-six programs were set aside because they were too new to demonstrate viability or reflected incorrect data. The MDHE accepted the justification for maintaining the remaining programs, but recommends that 17 undergo a follow-up review in three years. The reviews for 32 programs are currently incomplete.

Table 1.1: Summary table for four-year sector						
Institution	Number of programs reviewed	Number of programs to be deleted	Number of proposed new programs	Number of programs to be inactivated	Number of on-going reviews	Number of recommended follow-up evaluations
Harris-Stowe State University	8	0	0	0	0	6
Lincoln University	43	4	0	0	0	27
Missouri Southern State University	18	2	0	0	0	6
Missouri State University	41	7	1	0	0	20
Missouri University of Science & Technology	28	6	0	0	0	7
Missouri Western State University	19	1	0	0	0	7
Northwest Missouri State University	55	9	0	0	0	39
Southeast Missouri State University	29	4	1	0	0	10
Truman State University	7	0	0	0	0	3
University of Central Missouri	28	11	0	0	0	14
University of Missouri-Columbia	69	19	6	0	0	13
University of Missouri-Kansas City	34	5	1	7	0	5
University of Missouri-St. Louis	12	5	1	1	0	1
Total	391	73	10	8	0	158

Table 1.2: Summary table for two-year sector					
Institution	Number of programs reviewed	Number of programs to be deleted	Number of programs to be inactivated	Number of incomplete reviews	Number of recommended follow-up evaluations
Crowder College	28	6	0	0	9
East Central College	15	6	0	9	0
Jefferson College	10	5	0	0	1
Linn State Technical College	3	0	1	0	0
Metropolitan Community College	23	11	0	0	0
Mineral Area College	7	0	3	0	0
Moberly Area Community College	7	0	0	0	3
Missouri State University-West Plains	10	0	1	7	0
North Central Missouri College	20	5	5	0	2
Ozarks Technical College	3	2	0	0	0
St. Charles Community College	21	5	0	0	0
St. Louis Community College	27	1	6	15	1
State Fair Community College	8	3	0	0	0
Three Rivers Community College	14	2	0	0	1
Total	196	46	16	31	17

Recommendations and conclusions

1. **Improve the productivity of high-priority programs.**
   Many of the programs that fell below the productivity thresholds were in fields designated as state priorities: STEM (science, technology, engineering and mathematics), foreign language and teacher education. (See Table 1.3) The MDHE agreed with the institutions' justifications for retaining programs in these key areas as an investment in the state's future growth and development. As such, efforts must continue to strengthen these programs and develop appropriate and effective means of improving their productivity.

Table 1.3: Low-productivity in high-priority fields	
Program area (Two-digit CIP)	Number of baccalaureate programs statewide below threshold
Agriculture, Agriculture Operations and Related Services	10

Computer and Information Sciences and Support Services	8
Education	55
Engineering Technologies and Engineering-Related Fields	10
Foreign Languages, Literatures and Linguistics	27
Mathematics	8
Physical Sciences	16
Health Professions and Related Programs	16

2. **Strengthen policies for the review of new program proposals.**
   All new programs, if approved by the CBHE, should be placed on probation for five years, with a follow-up review required to remove the probationary status. If the program is not performing as expected or if there are not compelling reasons to continue the program, the CBHE may recommend termination of the program at the end of the five-year period.

3. **Develop appropriate reforms in teacher education in collaboration with DESE.**
   MDHE staff raised particular concerns about the high number of education programs below the degree-appropriate thresholds. (See Table 1.4) It may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular to strengthen both the quality and productivity of the programs. The MDHE stands ready, in collaboration with the Department of Elementary and Secondary Education, to explore and develop appropriate reforms in teacher education programs.

Table 1.4: Low-productivity in education programs			
Program area (by four-digit CIP)	**Number of baccalaureate programs in education statewide**	**Number of baccalaureate programs in education statewide below threshold**	**Percent of baccalaureate programs in education statewide below threshold**
All baccalaureate programs in Education	103	55	53.4%
Programs in Teacher Education and Professional Development, specific levels and methods (1312)	31	7	29.2%
Programs in Teacher Education and professional development, specific subject areas (1313).	60	43	71.6%

4. **Revise and update the policy for the regular review of existing academic programs.**
   The CBHE has a policy for the review of existing academic programs but it is in need of revision. The CBHE should direct the MDHE, in collaboration with representatives of the state's public institutions, to revise the policy for the review of existing academic programs. The revised process should examine program value within the context of statewide planning and the efficient use of state resources, and include an annual summary report to the CBHE.

5. **Develop a policy for the review of programs in the two-year sector.**
   The CBHE should authorize the MDHE, in collaboration with representatives of the state's two-year public institutions, to develop a policy for the review of academic programs in the two-year sector. This policy must account for the unique mission of the community and technical colleges, and the crucial role the sector plays in workforce development, among other issues and concerns.

6. **Encourage collaboration for program delivery among institutions, especially in foreign languages.**
   The CBHE has identified foreign language as a skill "critical to Missouri's future," and a state resolution listed foreign language as an indispensible skill for the global workforce. The MDHE applauds the efforts put forth by the institutions to create collaborative programs for the delivery of course content, especially in foreign languages. The MDHE will encourage continued efforts to increase collaboration by facilitating the linkage of need and capacity among institutions.

7. **Continue analysis of program duplication.**
   The governor asked the MDHE to identify duplicative programs as part of this special review. Further engaged discussion is required to define "unnecessary duplication" and to consider factors such as geographic proximity and institutional missions before recommendations can be made. Such discussion must address not only the state's short-term economic and political situation, but also the long-term health and vitality of the state's system of higher education. The MDHE will use guidance and expertise from institutional representatives to address the program duplication issue.

8. **Conduct follow-up reviews in three years.**
   MDHE staff recommends that 175 selected programs subjected to this special review undergo a follow-up evaluation in three years. In some cases, this recommendation applies to programs along the margins of efficient productivity. In others, it is intended to assess the effect of development plans to improve the recruitment, retention and matriculation of students within a given program.

Academic Program Review

Governor Jay Nixon, the Coordinating Board for Higher Education (CBHE) and the Missouri Department of Higher Education (MDHE) jointly hosted the Governor's Summit on Higher Education on August 17, 2010. In his remarks at the summit, Governor Nixon identified four main goals in his agenda for higher education, one of which was a statewide review of academic programs. The governor noted specifically that "in 2009, the number of new academic programs launched at our public institutions outpaced discontinued programs" by a significant margin, a pace he characterized as "unsustainable." The governor further declared that "[w]e must take a hard and unsentimental look at all academic programs, and cull those that are of low productivity, low priority or duplicative. We simply cannot afford the luxury of supporting programs that are not connected strategically to state needs and priorities." The governor charged the CBHE and the MDHE to conduct a review of all academic programs in the state's two-year and four-year public institutions of higher education, and report the findings to him by February, 2011.

The governor requested that this review "be informed and guided" by the CBHE's existing policies on program productivity and viability. In adopting the governor's agenda for higher education, the CBHE directed the MDHE to identify those programs "that do not meet published productivity criteria and request that institutions having programs that do not meet those criteria report on whether those programs will be eliminated, or if to be continued, their justifications for doing so."

The CBHE policy for the review of existing academic programs identifies four broad criteria for assessing programs:

1. Contribution of program to institutional mission
2. Statewide needs

3. Access
4. Program expenditures

In 1992, the CBHE adopted more specific criteria for assessing degree programs, standards the board reaffirmed in 1996. According to the criteria, degree programs shall, at a minimum:

1. Demonstrate centrality to the sponsoring institution's mission.
2. Provide objective evidence of success in addressing statewide needs and/or contributing toward the attainment of statewide goals.
3. Maintain a critical mass of majors and graduate annually an average, calculated over the prior three years, of at least 10 majors at the associate or baccalaureate degree level, 5 majors at the master's degree level, and 3 majors at the doctoral degree level, unless there is sufficient justification for exceptions, particularly in the arts and sciences.
4. Regularly produce highly qualified graduates as demonstrated in the following areas:
    a. Performance on assessments of general education, including measures of oral and written communication skills and critical thinking;
    b. Performance on nationally normed tests, licensure or certification examinations, and/or other measures of achievement in the major;
    c. Average placement rates of those seeking employment which take into account general economic conditions; and
    d. Alumni and employer satisfaction rates.

MDHE staff used these guidelines and the input of the chief academic officers (CAOs) of the state's four-year public institutions to develop a methodology for conducting the review. Although CBHE policy does not identify specific criteria for assessing academic programs in the two-year sector, the MDHE followed a similar process in developing the methodology for reviewing the two-year sector. The resulting methodologies are grounded in existing CBHE policy while taking into account time constraints and limited staff resources for conducting such a review. (See Appendix D for full methodology.)

For both sectors, the MDHE identified programs according to their Classification of Program (CIP) number, and flagged those whose degree production did not meet the minimum

for that degree. The institutions provided justifications for retaining the flagged programs or, in some cases, decided to delete the program from its inventory. In January 2011, MDHE finished reviewing the programs and wrote summary reports for each institution in both the two-year and four-year sectors. The MDHE shared these reports with the leaders of each institution for comment before the final report was compiled.

<u>Overview</u>

The MDHE initially identified 438 academic programs that appeared to be below the degree-appropriate level of productivity for the state's four-year public institutions. MDHE staff set aside 47 programs, either because they had been approved within the past five years (and had insufficient time to demonstrate viability) or they had data that had been misreported or miscoded. Of these, the institutions identified 73 programs for deletion, 18 percent of the 391 programs below the appropriate productivity thresholds. The MDHE accepted the justifications provided by the institutions for most of the remaining programs.

The MDHE identified 262 academic programs that fell below the degree-appropriate level of productivity for the state's two-year public institutions. MDHE staff set aside 66 programs, either because they had been approved within the past five years (and had insufficient time to demonstrate viability) or they had data that had been misreported or miscoded. Of these, the institutions identified 46 programs for deletion, 23.5 percent of the 196 programs below the productivity thresholds. The MDHE accepted the justifications provided by the institutions for most of the remaining programs.

A decision to retain or delete a program is complicated by a host of subjective criteria. Some may wonder how a program that produces very few graduates is worth keeping. The

institutions made strong cases for many such programs. The physics program at Missouri Southern State University provides a case in point.

Over the past three years, the physics program at Missouri Southern graduated exactly one student each year, well below the minimum threshold of 10 for baccalaureate programs. Missouri Southern vigorously justified the program on the basis that the physics program provides essential support for general education and other academic programs. The physics department faculty has made these service courses a priority, and teach courses specific to the physics major as overloads because they believe it is the only way to maintain a viable program in the discipline. Physics is in the so-called STEM fields (science, technology, engineering and mathematics), disciplines promoted as keys for building and sustaining a 21st century economy and workforce. Several employers in the region provided letters of support for the physics program, noting its contribution to the regional economy. In short, Missouri Southern's physics program provides great value to the state and region. Despite producing only one graduate annually, the MDHE agreed with the university's justifications and recommends the program's continuation. There were numerous examples similar to this from each institution.

<u>Findings and recommendations</u>

 1. **Improve the productivity of high-priority programs.**

Several patterns emerged as a result of this review. Perhaps one of the most alarming is that many of the academic programs that produce few degrees are in areas identified as statewide priorities, such as foreign languages, teacher education and, in particular, the STEM fields. The latter are seen as key to developing a twenty-first century workforce.

Objective 2B in *Imperatives for Change: Building a Higher Education System for the 21st Century* commits the state to increasing the number of degrees and certificates awarded in

STEM-related and health practitioner fields. The High School Core Curriculum recommended by the CBHE includes three units of both mathematics and science.

Table 1.1 shows that nine academic fields had five or more baccalaureate programs statewide that did not reach the productivity thresholds, all but one of which (philosophy) can be characterized as a statewide priority. Table 1.2 identifies broad, high-priority program areas in which there are many baccalaureate programs below the productivity threshold.

Table 1.1		
Six-digit CIP	Program title	Number of baccalaureate programs statewide below productivity threshold
160501	German	7
160901	French	9
160905	Spanish	5
270101	Mathematics	5
380101	Philosophy	5
400501	Chemistry	5
400601	Earth Sciences	6
400801	Physics	5
511005	Clinical Laboratory Science	7

Table 1.2		
Two-digit CIP	Program area	Number of baccalaureate programs statewide below threshold
11	Computer and Information Sciences and Support Services	8
13	Education	63

15	Engineering Technologies and Engineering-Related Fields	10
16	Foreign Languages, Literatures and Linguistics	27
27	Mathematics	8
40	Physical Sciences	16
51	Health Professions and Related Programs	16

The MDHE agreed with the institutions' justifications for retaining programs in these key areas as an investment in the state's future growth and development. As such, efforts must continue to strengthen these programs and develop appropriate and effective means of improving their productivity.

2. Strengthen policies for the review of new program proposals.

In setting forth his agenda for higher education, Governor Nixon noted that more programs were being added to the state's academic program inventory than were being deleted. The CBHE has statutory responsibility for approving new academic programs, and has clear policy guidelines that include expected productivity and costs to the state. The authority to eliminate a program, however, resides in an institution's governing body. The CBHE can do more to assure that new programs are cost-effective and productive in meeting statewide priorities.

The MDHE recommends that new academic programs, if approved by the CBHE, should be placed on probation for five years, with a follow-up review required before removing the probationary status. If the program is not performing as expected or if there are not compelling reasons to continue the program, the CBHE may recommend termination at the end of the five-year period.

3. Develop appropriate reforms in teacher education in collaboration with DESE.

There are 455 programs statewide reported under the broad area of Education, the single largest program category for the four-year public institutions. Education programs account for

nearly one-quarter of all academic programs statewide and two-and-one-half times more than the second largest category (Health Professions). Programs in Educational Administration account for more than 20 percent of all academic programs in Education.

MDHE staff raised particular concerns about the high number of education programs below the degree-appropriate thresholds. (See Table 1.3) It may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular to strengthen their quality and productivity. The MDHE stands ready, in collaboration with the Department of Elementary and Secondary Education, to explore and develop appropriate reforms in teacher education programs.

Table 1.4: Low-productivity in education programs			
Program area (by four-digit CIP)	Number of baccalaureate programs in education statewide	Number of baccalaureate programs in education statewide below threshold	Percent of baccalaureate programs in education statewide below threshold
All baccalaureate programs in Education	103	55	53.4%
Programs in Teacher Education and Professional Development, specific levels and methods (1312)	31	7	29.2%
Programs in Teacher Education and professional development, specific subject areas (1313).	60	43	71.6%

The large number of education programs flagged for this review presents an opportunity to devote more state resources to areas defined as "critical" or "statewide" priorities, such as STEM teaching fields, and to encourage greater coordination between the P-12 and higher education sectors. There may be other opportunities as well, such as rethinking professional development for P-12 teachers and innovations in P-12 education delivery.

4. **Revise and update the policy for the regular review of existing academic programs.**

   The CBHE has a policy for the review of existing academic programs but it is in need of revision. In past years, the institutions submitted annual reports on program review to the MDHE. This requirement was suspended several years ago while the MDHE and the institutions worked together to streamline the process and minimize duplication of effort. For many reasons, that initiative was never completed.

   The CBHE should direct the MDHE, in collaboration with representatives of the state's public institutions, to revise the policy for the review of existing academic programs. The revised process should examine program value within the context of statewide planning and the efficient use of state resources, and include an annual summary report to the CBHE.

5. **Develop a policy for the review of programs in the two-year sector.**

   The two-year sector had fewer programs identified for further review than did the four-year sector. As the CBHE's policy for program review was written primarily with the four-year institutions in mind, it is likely that the methodology used for this review does not account fully for the various means of measuring program productivity within the two-year sector.

   The MDHE recommends that the CBHE should authorize the MDHE, in collaboration with representatives of the state's two-year public institutions, to develop guidelines to review academic programs in the two-year sector that account for the unique mission of the community and technical colleges, and the crucial role the sector plays in workforce development.

6. **Encourage collaboration for program delivery among institutions, especially in foreign languages.**

   The CBHE has identified foreign language as a skill "critical to Missouri's future" and "strongly recommends" that high school students complete at least two units of a foreign language as an elective. The Missouri legislature in 2010 passed a resolution that encouraged

higher education to "emphasize international education, including foreign language instruction and study abroad, in order to ensure graduates have the cross-cultural skills necessary to function effectively in the global workforce."

The MDHE applauds the efforts put forth by the institutions to create collaborative programs for the delivery of course content, especially in foreign languages. The MDHE will encourage and facilitate continued efforts to increase collaboration among the institutions in achieving statewide priorities by facilitating the linkage of need and capacity among institutions..

7. Analyze program duplication.

As part of its statutory responsibility, the Coordinating Board for Higher Education reviews academic programs to ensure that there is no "unnecessary duplication" of academic programs and state resources are used efficiently. Needless to say, there is significant duplication of academic programs among Missouri's 13 four-year public institutions of higher education, which collectively number nearly 1,900 programs distributed among 28 two-digit CIP codes. At one end of the spectrum is Harris-Stowe State University, which offers 14 academic programs, while at the other is the University of Missouri-Columbia with more than 300 programs.

Some program duplication is warranted, such as general education programs common to all institutions of higher education. Determining what constitutes "unnecessary duplication" is subjective, as there is no policy or precedent to use as a guide. Many of the general education programs flagged for further analysis are duplicated programs, yet eliminating them would restrict access to higher education for many Missourians.

The MDHE's analysis of the program inventory of the state's public four-year institutions of higher education, using broad, two-digit CIP categories, has identified several program areas that *may be* unnecessarily duplicative. Table 1.4 lists discipline areas in which there are at least

five baccalaureate programs statewide below the productivity threshold. Additional review will be necessary, however, to determine if these programs are unnecessarily duplicative.

Table 1.4: Low-productivity and duplication in broad program disciplines, four-year sector		
Two-digit CIP	Program area	Number of baccalaureate programs statewide below threshold
01	Agriculture, Agriculture Operations and Related Services	10
11	Computer and Information Sciences and Support Services	8
13	Education	63
15	Engineering Technologies and Engineering-Related Fields	10
16	Foreign Languages, Literatures and Linguistics	27
23	English Language and Literature	5
27	Mathematics	8
30	Multi/Interdisciplinary Studies	6
38	Philosophy and Religious Studies	5
40	Physical Sciences	16
45	Social Sciences	15
50	Visual and Performing Arts	21
51	Health Professions and Related Programs	16
52	Business, Management, Marketing and Related Support Services	11

The issue of low-productivity and duplication is less pronounced in the two-year sector, although, as with the four-year sector, areas of concern fall in the category of statewide priorities.

Table 1.5: Low-productivity and duplication in broad program disciplines, two-year sector		
Two-digit CIP	Program title	Number of programs statewide below threshold
11	Computer and Information Sciences and Support Services	25
15	Engineering Technologies and Engineering-Related Fields	45
51	Health Professions and Related Programs	25

The MDHE has gone as far as it can in reviewing program duplication without further engagement with the institutions and other stakeholders. There needs to be agreement on what constitutes "unnecessary duplication" and to what extent such factors as geographic proximity and institutional missions should be taken into account, if at all. The MDHE needs the guidance and expertise that the institutional representatives can provide in addressing these and other issues.

8. Conduct follow-up evaluations in three years.

The MDHE recommends follow-up evaluation in three years of 175 selected programs (158 programs in the four-year sector and 17 programs in the two-year sector). In some cases this recommendation applies to programs whose low-degree production might be an aberration or explained by the recent economic downturn. For other programs, the follow-up is intended to assess the effectiveness of strategic plans developed by the institutions to improve student retention and degree production. For still others, the intent of the follow-up is to examine the effectiveness of novel approaches to low degree productivity, with the expectation that successful approaches might be exported to other institutions and other programs.

Conclusion

This special review of academic programs provided valuable insights into higher education in Missouri. It identified high priority but low-producing programs in foreign languages, teacher education and STEM fields that should be strengthened for the state to fulfill projected work force needs, grow economically and compete globally. It afforded new opportunities for institutions to collaborate on academic program delivery, and this collaboration will continue. It also identified the need for new policies and processes to promote the efficient use of state resources while maintaining academic quality on campuses statewide.

18

The Coordinating Board for Higher Education, and its administrative arm, the Missouri Department of Higher Education, seek to promote a more robust, efficient and accountable system of higher education for Missouri. Academic program review will continue to be one of the policy tools used by the CBHE to accomplish this.

###

Institutional Summary Reports

4-year Sector

HARRIS-STOWE STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified eight programs that fell below the degree-appropriate productivity threshold. The MDHE asked officials at Harris-Stowe State University (HSSU) to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Baccalaureate	Early Childhood Education	6.7
Baccalaureate	Health Care Management	4.3
Baccalaureate	Hospitality & Tourism Management	2.0
Baccalaureate	Information Sciences and Computer Technology	5.3
Baccalaureate	Middle School/Junior High School Education	2.3
Baccalaureate	Professional Interdisciplinary Studies	6.3
Baccalaureate	Secondary Education	9.0
Baccalaureate	Urban Education	4.7
Total	**8**	

Harris-Stowe State University did not identify any programs for deletion or inactivation.

MDHE staff accepted the justifications provided by Harris-Stowe State University for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Information Sciences/Computer Technology	BS	• Mission critical • Supports other programs • Underserved access • Unique need • Other: Development plan
Professional Interdisciplinary Studies	BS	• Mission critical • Supports other programs • Interdisciplinary • Underserved access

MDHE staff recommends that the three programs listed below be retained and undergo a follow-up review in three years.

Program recommended for follow-up review in three years		
Program title	Degree	Brief summary of justifications
Health Care Management	BS	• Mission critical • Supports other programs • Underserved access • Unique need • Other: Development plan
Urban Education	BS	• Mission critical • Underserved access
Early Childhood	BS	• Mission critical • Shared courses/faculty • Demand • Underserved access • Unique need
Middle School/Junior High School	BS	• Mission critical • Shared courses/faculty • Underserved access
Secondary Education	BS	• Mission critical • Shared courses/faculty • Underserved access
Hospitality and Tourism Management	BS	• Mission critical • Shared courses/faculty • Underserved access • Unique need • Increased demand

MDHE staff raised particular concerns about several programs. Hospitality and Tourism Management has averaged about 6.7 majors and about 1.0 graduate over the past nine years (2.0 over the past three years). The institution believes that the demand for employment in the hospitality industry will increase in the next several years. Given the limitations of the current review, the MDHE does not recommend outright elimination now. The MDHE does recommend, however, that the governing board of Harris-Stowe State University thoroughly assess the viability and cost effectiveness of the program to determine if it should be retained.

MDHE staff also has concerns about Harris-Stowe State College's education programs. As education programs at other institutions face challenges similar to Harris-Stowe's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

LINCOLN UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 50 programs that fell below the appropriate degree productivity threshold. Seven programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE asked officials at Lincoln University to provide justifications for the following programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Associate	Administration and Office Management	1.0
Associate	Computer Science	1.3
Associate	Criminal Justice	1.5
Associate	Drafting Technology	5.0
Associate	Early Childhood Care and Education	4.0
Associate	Pre-Engineering	1.3
Baccalaureate	Accounting	8.0
Baccalaureate	Agribusiness	1.3
Baccalaureate	Agriculture	8.7
Baccalaureate	Applied Science in Technology	none
Baccalaureate	Biology	8.3
Baccalaureate	Chemistry	1.5
Baccalaureate	Civil Engineering Technology	5.0
Baccalaureate	Economics	none
Baccalaureate	English	2.7
Baccalaureate	Fine/Studio Arts	4.0
Baccalaureate	History	5.7
Baccalaureate	Mathematics	3.0
Baccalaureate	Medical Technology	1.0

Baccalaureate	Middle School Education	1.0
Baccalaureate	Physics	1.0
Baccalaureate	Political Science	6.3
Baccalaureate	Public Administration	none
Baccalaureate	Sacred Music	3.0
Baccalaureate	Art Education	2.0
Baccalaureate	Biology Education	none
Baccalaureate	Business Education	2.0
Baccalaureate	Chemistry Education	none
Baccalaureate	English Education	none
Baccalaureate	Mathematics Education	none
Baccalaureate	Music Education	1.0
Baccalaureate	Physical Education	2.0
Baccalaureate	Physics Education	none
Baccalaureate	Social Science Education	2.3
Baccalaureate	Sociology	7.0
Baccalaureate	Spanish	2.7
Baccalaureate	Special Education	6.7
Baccalaureate	Wellness	5.7
Ed.Sp.	Educational Leadership	4.0
Masters	History	4.0
Masters	School Administration and Supervision	4.0
Masters	Social Science	1.0
Masters	Sociology	3.0
TOTAL	**43**	

Of these, Lincoln identified four programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Associate	Administration and Office Management
Baccalaureate	Applied Science in Technology
Baccalaureate	Economics
Masters	Social Science

MDHE staff accepted the justifications provided by Lincoln for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Computer Science	AAS	• Shared courses/faculty
Criminal Justice	AA	• Shared courses/faculty
Drafting Technology	AAS	• Shared courses/faculty • Other: development plan/faculty
Pre-Engineering	AAS	• Interdisciplinary • Shared courses/faculty • Underserved access • Other: development plan/faculty
English	BA	• Mission critical, Supports other programs • Shared courses/faculty • Unique need • Other: revenue-producing program
Fine/Studio Arts	BA	• Mission critical • Supports other programs • Interdisciplinary • Underserved access • Other: development plan/faculty, revenue-producing program, collaboration with community
Public Administration	BS	• Unique need
Sociology	BA/BS	• Mission critical • Supports other programs • Interdisciplinary • Shared courses/faculty • Underserved access • Unique need
Special Education	B.S. Ed.	• Supports other programs • Shared courses/faculty

		• Unique need
Educational Leadership	Ed.S.	• Mission critical • Shared courses/faculty • Demand • Underserved access • Unique need • Other: development plan/faculty
Sociology	MA	• Mission critical • Interdisciplinary • Shared courses/faculty • Underserved access
Accounting	BS	• Unique need • Other

MDHE staff recommends that the programs listed in the table below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Early Childhood Care and Education	AAS	• Supports other programs • Shared courses/faculty • Underserved access • Unique need • Other: collaborative program with early head start
Agribusiness	BS	• Mission critical • Underserved access • Unique need
Agriculture	BS	• Mission critical • Demand • Underserved access
Biology	BS	• Mission critical • Supports other programs • Demand
Chemistry	BS	• Mission critical • Demand • Underserved access
Civil Engineering Technology	BS	• Mission critical • Supports other programs • Shared courses/faculty • Unique need • Other: development plan/faculty
History	BA	• Supports other programs • Shared courses/faculty • Unique need
Mathematics	BA/BS	• Mission critical • Supports other programs • Demand • Underserved access • Unique need

Medical Technology	BS	• Demand • Other: Caring for Missourians Initiative
Middle School Education	B.S. Ed.	• Shared courses/faculty • Other: development plan/faculty
Physics	BS	• Mission critical • Supports other programs • Demand
Political Science	BA	• Mission critical • Supports other programs • Underserved access • Other: development plan/faculty
Sacred Music	BA	• Mission critical • Supports other programs • Shared courses/faculty • Underserved access
Spanish	BA	• Mission critical • Supports other programs • Demand • Unique need • Other: potential for collaborative program
Wellness	BS	• Mission critical • Supports other programs • Shared courses/faculty • Underserved access • Other: development plan/faculty
History	MA	• Shared courses/faculty • Demand • Unique need
School Administration and Supervision	M.Ed.	• Shared courses/faculty • Demand • Underserved access • Unique need • Other: development plan/faculty
Art Education Biology Education Business Education Chemistry Education English Education Mathematics Education Music Education Physical Education Physics Education Social Science Education	B.S. Ed.	• Mission critical • Demand • Underserved access • Unique need

Although MDHE staff does not recommend elimination of Lincoln University's programs in Secondary Education, staff does have strong concerns about the viability of the programs. All of the Secondary Education programs combined have averaged less than 10 graduates annually for the past three years.

Programs of concern		
Program title	**Degree**	**Average annual number of graduates for three previous years**
Art Education	B.S. Ed.	2.0
Biology Education	B.S. Ed.	none
Business Education	B.S. Ed.	2.0
Chemistry Education	B.S. Ed.	none
English Education	B.S. Ed.	none
Mathematics Education	B.S. Ed.	none
Music Education	B.S. Ed.	1.0
Physical Education	B.S. Ed.	2.0
Physics Education	B.S. Ed.	none
Social Science Education	B.S. Ed.	2.3
Total graduates for all Secondary Education programs		**9.3**

Moreover, in many cases both the education program and the companion content program combined (i.e., English Education and English, Chemistry Education and Chemistry) are below the productivity thresholds.

Program name	Average annual number of graduates for three previous years	Total graduates for education program and content program
Biology Education	none	8.3
Biology	8.3	
Chemistry Education	none	1.5
Chemistry	1.5	
English Education	none	2.7
English	2.7	
Art Education	2.0	6.0
Fine/Studio Arts	4.0	
Mathematics Education	none	3.0
Mathematics	3.0	
Physics Education	none	1.0
Physics	1.0	

As education programs at other institutions face challenges similar to Lincoln's, it may be timely to conduct a statewide assessment of education programs generally and teacher

preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

MISSOURI SOUTHERN STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 20 programs that fell below the productivity threshold. Two programs (Nursing and Criminal Justice) should not have been included in the list, because they were approved within the past five years and has not had sufficient time to demonstrate viability.

The MDHE asked officials at Missouri Southern State University to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Associate	Computer Assisted Manufacturing	6.3
Associate	Computer Information Science	9.7
Associate	Radiologic Technology	8.0
Baccalaureate	Chemistry	2.0
Baccalaureate	Environmental Health	7.7
Baccalaureate	French	1.5
Baccalaureate	German	3.0
Baccalaureate	History	3.7
Baccalaureate	International Studies	3.3
Baccalaureate	Justice Studies	none
Baccalaureate	Management Technology	3.0
Baccalaureate	Mathematics	4.7
Baccalaureate	Medical Technology	2.0
Baccalaureate	Middle School Education	3.7
Baccalaureate	Music	4.0
Baccalaureate	Physics	1.0
Baccalaureate	Theatre	2.3
Masters	Dental Hygiene	none
TOTAL	18	

Of these, Missouri Southern State University identified two programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Baccalaureate	Justice Studies
Baccalaureate	Management Technology

MDHE staff accepted the justifications provided by Missouri Southern for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Computer Assisted Manufacturing	AS	• Supports other programs • Shared courses/faculty • Unique need
Radiologic Technology	AS	• Mission critical • Demand • Unique need
Chemistry	BS, BA	• Mission critical • Supports other programs
History	BA	• Mission critical • Supports other programs
International Studies	BA	• Mission critical
Mathematics	BS	• Mission critical • Supports other programs • Interdisciplinary
Music	BA	• Supports other programs
Physics	BS	• Shared courses/faculty
Theatre	BA	• Mission critical • Supports other programs
Dental Hygiene	MS	• Student demand • Consortium

MDHE staff recommends that the programs listed below be retained and undergo a follow-up evaluation in three years.

Programs recommended for follow-up evaluation in three years		
Program title	**Degree**	**Brief summary of justifications**
Computer Information Science	AS	• Shared courses/faculty • Other: New data
Environmental Health	BS	• Unique need
German	BA	• Mission critical • Supports other programs • Interdisciplinary • Underserved access • Other: Collaborative possibility
French	BA	• Mission critical • Supports other programs • Interdisciplinary • Underserved access • Other: Collaborative possibility
Medical Technology	BS	• Unique need
Middle School Education	BSE	• Mission critical • Supports other programs • Shared courses/faculty • Unique need • Other

MDHE staff has particular concerns about the Middle School Education program. As education programs at other institutions face challenges similar to Missouri Southern's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular.

Program of concern		
Program title	**Degree**	**Average annual number of graduates for three previous years**
Middle School Education	BSE	3.7

MISSOURI STATE UNIVERSITY
Statewide Review of Academic Programs

<u>Summary Report</u>

MDHE staff identified 45 programs that fell below the productivity threshold. Four programs (Applied Anthropology, Project Management, Early Childhood & Family Development, and Global Studies) should not have been included in the list, because they had been approved within the past five years and have not had sufficient time to demonstrate viability.

The MDHE asked officials at Missouri State University to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Baccalaureate	Agricultural Education	6.3
Baccalaureate	Agronomy	7.0
Baccalaureate	Antiquities	6.0
Baccalaureate	Art History (collab. w/ Drury Univ.)	2.7
Baccalaureate	Biology Education	8.7
Baccalaureate	Business Education	6.3
Baccalaureate	Chemistry Education	2.7
Baccalaureate	Clinical Laboratory Sciences - Medical Tech	2.0
Baccalaureate	Dance	5.0
Baccalaureate	Earth Science Education	3.0
Baccalaureate	Emerging Technologies Management	9.3
Baccalaureate	Engineering Physics	2.0
Baccalaureate	French	2.0
Baccalaureate	French	6.7
Baccalaureate	Geology	9.3
Baccalaureate	Geospatial Sciences	4.3
Baccalaureate	German	1.0

Baccalaureate	German	2.3
Baccalaureate	Gerontology	5.0
Baccalaureate	Horticulture	8.7
Baccalaureate	Latin	1.5
Baccalaureate	Latin Education	2.0
Baccalaureate	Mathematics	8.7
Baccalaureate	Music	4.5
Baccalaureate	Musical Theatre	8.0
Baccalaureate	Philosophy	7.7
Baccalaureate	Physics	4.7
Baccalaureate	Physics Education	1.3
Baccalaureate	Public Administration	4.3
Baccalaureate	Respiratory Therapy	3.5
Baccalaureate	Spanish Education	6.3
Baccalaureate	Speech & Theatre Education	9.0
Baccalaureate	Technology Education	1.5
Masters	Cell and Molecular Biology	3.3
Masters	Chemistry	4.7
Masters	Engineering Management	None
Masters	Geospatial Sciences in Geography and Geology	3.7
Masters	Materials Science	4.7
Masters	Mathematics	3.3
Masters	Plant Science	3.0
Masters	Theatre	3.0
Total	**41**	

Of these, MSU identified seven programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Baccalaureate	Antiquities
Baccalaureate	Dance
Baccalaureate	Emerging Technologies Management
Baccalaureate	Engineering Physics
Baccalaureate	Public Administration
Baccalaureate	Technology Education
Masters	Engineering Management

Although MSU intends to delete the Antiquities program, it also intends to submit a proposal for a new program in Classics with concentrations available in Latin and Antiquities.

MDHE staff accepted the justifications provided by Missouri State University for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Art History (collab. w/ Drury Univ.)	BA	• Supports other programs • Shared courses/faculty • Other: Development Plan
Clinical Laboratory Sciences -Medical Tech	BS	• Shared courses/faculty • Demand • Other: Unique program; meets regional need
French	BA	• Supports other programs • Shared courses/faculty • Other: Curriculum revisions, potential for collaboration
Geology	BS	• Supports other programs • Other: Most recent graduate data meets productivity threshold for three years
Geospatial Sciences	BS	• Shared courses/faculty
German	BA	• Supports other programs • Shared courses/faculty • Other: Curriculum revisions, potential for collaboration
Gerontology	BS	• Unique need • Other: Development plan
Latin	BA	• Supports other programs • Shared courses/faculty

		• Other: Create new degree in classics - combine antiquities and Latin programs
Music	BA	• Supports other programs • Shared courses/faculty • Other: Supports other productive programs
Philosophy	BA, BS	• Mission critical • Supports other programs • Other: Development plan
Respiratory Therapy	BS	• Shared courses/faculty • Other: Development plan
Geospatial Sciences in Geography and Geology	MS	• Demand • Unique need • Other: Development plan
Materials Science	MS	• Demand • Unique need • Other: Development plan
Plant Science	MS	• Interdisciplinary • Demand • Unique need • Other: Development plan, collaboration with institutions in China

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Agricultural Education	BSE	• Shared courses • Other: Internal review
Agronomy	BS	• Other: Past performance; development plan; curricular changes
Horticulture	BS	• Other: Development plan; curricular changes
Musical Theatre	BFA	• Interdisciplinary • Shared courses/faculty • Unique need • Other: Development plan
Physics	BS	• Supports other programs • Other: Curricular redesign; development plan.
Cell and Molecular Biology	MS	• Demand • Other: Development plan
Chemistry	MS	• Demand • Unique need • Other: Development plan; funding opportunities
Mathematics	MS	• Shared courses/faculty • Other: Development plan
Theatre	MA	• Unique need
Biology Education	BSE	• Shared courses • Other: Internal review

Chemistry Education	BSE	• Shared courses • Other: Internal review
Earth Science Education	BSE	• Shared courses • Other: Internal review
Physics Education	BSE	• Shared courses • Other: Internal review
French Education	BSE	• Shared courses • Other: Internal review
Spanish Education	BA	• Shared courses • Other: Internal review
Speech & Theatre Education	BSE	• Shared courses • Other: Internal review
Latin Education	BSE	• Shared courses • Other: Internal review
Mathematics Education	BSE	• Shared courses • Other: Internal review
German Education	BSE	• Shared courses • Other: Internal review
Business Education	BSE	• Shared courses • Other: Internal review

MDHE staff has particular concerns about Missouri State's programs in Secondary Education. As education programs at other institutions face challenges similar to Missouri State's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

Programs of concern		
Program title	**Degree**	**Average annual number of graduates for three previous years**
Biology Education	BSE	8.7
Chemistry Education	BSE	2.7
Earth Science Education	BSE	3.0
Physics Education	BSE	1.3
French Education	BSE	2.0
Spanish Education	BA	6.3
Speech & Theatre Education	BSE	9.0
Latin Education	BSE	2.0
Mathematics Education	BSE	8.7
German Education	BSE	1.0
Business Education	BSE	6.3

MISSOURI UNIVERSITY of SCIENCE & TECHNOLOGY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 29 programs that fell below the degree-appropriate productivity threshold. One program (Explosives Engineering) should not have been included in the list, because it had been approved within the past five years and has not had sufficient time to demonstrate viability.

The MDHE asked officials at Missouri University of Science & Technology to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Baccalaureate	Chemistry	7.7
Baccalaureate	English	8.0
Baccalaureate	Interdisciplinary Engineering	none
Baccalaureate	Nursing (coop with UMSL)	none
Baccalaureate	Petroleum Engineering	9.0
Baccalaureate	Philosophy	1.0
Masters	Applied Mathematics	4.3
Masters	Ceramic Engineering	2.0
Masters	Earth Sciences	none
Masters	Engineering Mechanics	3.3
Masters	Mathematics	2.3
Masters	Metallurgical Engineering	3.3
Masters	Mining Engineering	3.7
Masters	Nuclear Engineering	3.0
Masters	Petroleum Engineering	3.7
Doctoral	Aerospace Engineering	1.0
Doctoral	Chemical Engineering	2.5
Doctoral	Computer Engineering	2.5
Doctoral	Computer Science	2.3

Doctoral	Engineering Mechanics	none
Doctoral	Geological Engineering	1.5
Doctoral	Geology and Geophysics	2.5
Doctoral	Mathematics	2.7
Doctoral	Metallurgical Engineering	1.0
Doctoral	Mining Engineering	2.7
Doctoral	Nuclear Engineering	none
Doctoral	Petroleum Engineering	none
Doctoral	Physics (coop with UMSL)	2.7
Total	**28**	

Of these, Missouri University of Science & Technology identified six programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Baccalaureate	Chemistry
Baccalaureate	Interdisciplinary Engineering
Baccalaureate	Nursing (coop with UMSL)
Masters	Engineering Mechanics
Masters	Earth Sciences
Doctoral	Engineering Mechanics

MDHE staff accepted the justifications provided by Missouri University of Science & Technology for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
English	B.A.	• Mission critical • Supports other programs • Underserved access
Petroleum Engineering	B.S.	• Mission critical • Shared courses/faculty • Other: Development plan

Ceramic Engineering	M.S.	• Mission critical • Shared courses/faculty • Demand • Unique need
Mathematics	M.S.T.	• Shared courses/faculty • Underserved access
Metallurgical Engineering	M.S.	• Mission critical • Shared courses/faculty • Demand • Unique need
Mining Engineering	M.S.	• Mission critical • Unique need
Nuclear Engineering	M.S.	• Mission critical • Unique need
Petroleum Engineering	M.S.	• Mission critical • Shared courses/faculty • Unique need • Other: Development plan
Chemical Engineering	Ph.D.	• Mission critical
Geological Engineering	Ph.D.	• Mission critical • Shared courses/faculty • Unique need • Other: Produces external revenue
Geology and Geophysics	Ph.D.	• Mission critical • Supports other programs • Demand • Unique need • Other: Produces external revenue
Metallurgical Engineering	Ph.D.	• Mission critical • Shared courses/faculty • Demand • Unique need
Mining Engineering	Ph.D.	• Mission critical • Unique need
Nuclear Engineering	Ph.D.	• Mission critical • Unique need
Physics (coop with UMSL)	Ph.D.	• Mission critical • Demand
Applied Mathematics	M.S.	• Mission critical • Supports other programs • Shared courses/faculty • Unique need

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Philosophy	B.A.	• Mission critical • Other: Development plan
Aerospace Engineering	Ph.D.	• Mission critical • Shared courses/faculty • Demand • Unique need
Computer Engineering	Ph.D.	• Shared courses/faculty
Computer Science	Ph.D.	• Shared courses/faculty • Demand • Other: Strong masters degree; development plan
Mathematics	Ph.D.	• Mission critical • Supports other programs • Unique need • Other: Development plan
Petroleum Engineering	Ph.D.	• Mission critical • Shared courses/faculty • Unique need • Other: Development plan

MISSOURI WESTERN STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 19 programs that fell below the productivity threshold. The MDHE asked officials at Missouri Western State University to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Associate	Manufacturing Engineering Technology	2.7
Associate	Criminal Justice	9.0
Associate	Legal Assistant	7.0
Baccalaureate	Computer Science	3.0
Baccalaureate	Computer Information Systems	6.0
Baccalaureate	Electrical Engineering Technology	7.0
Baccalaureate	Electrical & Computer Engineering Technology	1.5
Baccalaureate	French	1.6
Baccalaureate	Spanish	5.7
Baccalaureate	Biochemical and Molecular Biology	3.3
Baccalaureate	Mathematics	9.0
Baccalaureate	Interdisciplinary Studies	4.0
Baccalaureate	Political Science	9.7
Baccalaureate	Art	1.7
Baccalaureate	English (Education)	5.7
Baccalaureate	Music (Education)	4.0
Baccalaureate	Speech and Theater (Education)	1.5
Baccalaureate	Art (Education)	3.3
Baccalaureate	French (Education)	none
Total	19	

Of these, Missouri Western identified one program for deletion.

Program identified by institution for deletion	
Degree level	Program name
Baccalaureate	Art

MDHE staff accepted the justifications provided by Missouri Western for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Manufacturing Engineering Technology	AS	• Mission critical • Shared courses/faculty • Demand
Legal Assistant	AS	• Mission critical • Shared courses/faculty
Criminal Justice	AS	• Mission critical • Shared courses/faculty • Underserved access
Computer Information Systems	BS	• Mission critical • Supports General Education
Electrical Engineering Technology	BS	• Mission critical • Supports General Education • Unique need
Electrical and Computer Engineering Technology	BS	• Interdisciplinary • Shared courses/faculty • Other: Development plan
Spanish	BA	• Supports General Education • Consortium
Biochemistry and Molecular Biology	BS	• Mission critical • Interdisciplinary • Unique need
Mathematics	BS	• Mission critical • Supports General Education
Interdisciplinary Studies	BIS	• Interdisciplinary • Shared courses/faculty
Political Science	BS	• Supports General Education

MDHE staff recommends that the three programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Computer Science	BS	• Mission critical • Supports other programs • Other: Development Plan
French	BA	• Supports other programs • Consortium • Other: Development plan
English	BSE	• Mission critical • Interdisciplinary • Shared courses/faculty

MDHE staff has particular concerns about the programs listed below. As education programs at other institutions face challenges similar to Missouri Western's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

Programs of concern		
Degree level	Program name	Average annual number of graduates for three previous years
Baccalaureate	French (Education)	none
Baccalaureate	Music (Education)	4.0
Baccalaureate	Speech and Theater (Education)	1.5
Baccalaureate	Art (Education)	3.3

NORTHWEST MISSOURI STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

SOUTHEAST MISSOURI STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 34 programs that fell below the degree-appropriate productivity threshold. Four programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE asked officials at Southeast Missouri State University to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Associate	Child Care & Guidance	6.0
Associate	Computer Technology	8.0
Baccalaureate	French	3.0
Baccalaureate	Anthropology	6.7
Baccalaureate	German	7.0
Baccalaureate	Philosophy	4.3
Baccalaureate	Theatre and Dance	2.7
Baccalaureate	Music	4.3
Baccalaureate	History	8.3
Baccalaureate	Performing Arts	6.7
Baccalaureate	Environmental Science	4.0
Baccalaureate	Corporate Communication	none
Baccalaureate	Engineering Physics	3.7
Baccalaureate	Medical Technology	3.0
Baccalaureate	Hospitality Management	none
Baccalaureate	Family & Consumer Sciences Education	4.7
Baccalaureate	Economics	9.0
Baccalaureate	Administrative Systems Management	6.3

Baccalaureate	International Business	none
Baccalaureate	Mathematics Education	8.0
Baccalaureate	Secondary Education/Biology (Unified Science)	7.0
Baccalaureate	Art Education	4.0
Baccalaureate	Business & Marketing Education	3.7
Baccalaureate	Secondary Education/French	4.0
Baccalaureate	Industrial Education	4.7
Masters	Exceptional Child Education	2.7
Masters	History	4.0
Masters	Nutrition & Exercise Science	2.7
Masters	Criminal Justice	4.7
Total	**29**	

Of these, Southeast Missouri State University identified four programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Baccalaureate	Administrative Systems Management
Baccalaureate	French*
Baccalaureate	German*
Baccalaureate	Spanish (not on low-productivity list)*

*Although Southeast Missouri State University intends to delete three foreign language programs, it also intends to submit a proposal for a new program in Global Cultures, with concentrations available in German, French, and Spanish.

MDHE staff accepted the justifications provided by Southeast Missouri State University for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Environmental Science	BS	• Interdisciplinary • Shared courses/faculty
Corporate Communication	BS	• Other: Development plan
Mathematics Education	BSED	• Shared courses/faculty • Unique need
Secondary Education/Biology (Unified Science)	BSED	• Shared courses/faculty • Unique need
Engineering Physics	BS	• Shared courses/faculty • Underserved access • Unique need
Computer Technology	AAS	• Shared courses/faculty
Child Care & Guidance	AA	• Shared courses/faculty
Philosophy	BA	• Supports other Programs
Criminal Justice	MS	• Other: Recent collaboration w/ MSSU in delivery of this program
Performing Arts	BFA	• Mission critical • Shared courses/faculty
Theatre and Dance	BA	• Mission critical • Shared courses/faculty
Music	BA	• Mission critical • Shared courses/faculty • Unique need
Medical Technology	BS	• Shared courses/faculty
International Business	BSBA	• Shared courses/faculty
History	BA	• Supports other programs • Shared courses/faculty
History	MA	• Shared courses/faculty • Unique need

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Anthropology	BA	• Supports other programs • Consortium • Other: Reconfiguration of program
Economics	BS/BSBA	• Consortium

Exceptional Child Education	MA	• Unique need • Other: Development plan
Nutrition & Exercise Science	MS	• Interdisciplinary
Art Education	BSED	• Mission Critical • Supports other programs • Shares courses/faculty • Unique need
Business & Marketing Education	BSED	• Shares courses/faculty • Other: development plan
Family & Consumer Sciences Education	BS	• Shares courses/faculty • Other: development plan
Industrial Education	BSED	• Shares courses/faculty • Other: development plan
Secondary Education/French	BSED	• Shares courses/faculty • Other: development plan

MDHE staff has particular concerns about the education programs listed below. As education programs at other institutions face challenges similar to Southeast Missouri State's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

There is a discrepancy in the data provided by Southeast Missouri State University and the data MDHE found for the Hospitality Management program. The MDHE and Southeast Missouri State are working to reconcile the data.

Programs requiring further review by MDHE staff (data discrepancy)	
Program title	Degree
Hospitality Management	BS

TRUMAN STATE UNIVERSITY
Statewide Review of Academic Programs

<u>Summary Report</u>

MDHE staff identified eight programs that fell below the degree-appropriate productivity threshold. The institution provided MDHE with one additional program that was not on the original list (Art History). Two programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE requested officials at Truman State University to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Baccalaureate	Art History	4.7
Baccalaureate	Russian	2.0
Baccalaureate	German	4.3
Baccalaureate	Classics	3.3
Masters	Counseling	None
Masters	Biology	2.0
Masters	Music	4.7
Total	7	

MDHE staff accepted the justifications provided by Truman State University for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	Degree	Brief summary of justifications
Art History	BA	• Critical to mission • Supports general education • Shares courses between programs • Provides unique need as highly-selective institution
German	BA	• Critical to mission
Counseling	MA	• Other: Program development
Music	MA	• Critical to mission

MDHE staff recommends that the three programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Biology	MS	• Supports other programs • Shared courses/faculty • Demand • Unique need • Other: Recent reconfiguration, external funding
Russian	BA	• Inaccurate data • Mission critical • Supports other programs • Unique need
Classics	BA	• Mission critical • Interdisciplinary • Unique need

UNIVERSITY OF CENTRAL MISSOURI
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 34 programs that fell below the productivity threshold. Six programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE asked officials at the University of Central Missouri to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Baccalaureate	Spanish	2.0
Baccalaureate	Crisis & Disaster Management	7.3
Baccalaureate	Occupational Education	None
Baccalaureate	Mathematics	5.0
Baccalaureate	Chemistry	3.3
Baccalaureate	Studio Art	9.7
Baccalaureate	Medical Technology	3.7
Baccalaureate	Actuarial Science & Mathematics	5.3
Baccalaureate	Computer Science	6.7
Baccalaureate	Occupational Health & Safety	4.3
Baccalaureate	Economics	9.0
Masters	Industrial Hygiene	3.3
Masters	Mathematics	2.7
Masters	Psychology	2.3
Masters	Theatre	4.3
Masters	Music	3.7
Masters	History	3.0
Baccalaureate	Agricultural Technology	

Baccalaureate	Journalism	
Baccalaureate	French	
Baccalaureate	Industrial Technology	
Baccalaureate	Speech Communication	
Baccalaureate	Liberal Studies	
Baccalaureate	General Recreation	
Baccalaureate	Earth Science	
Baccalaureate	Geography	
Baccalaureate	Tourism	
Specialist	Curriculum and Instruction	
Total	**28**	

Of these, the University of Central Missouri identified these programs listed in the table below for deletion:

Programs identified by institution for deletion	
Degree level	**Program name**
Baccalaureate	Agricultural Technology
Baccalaureate	Journalism
Baccalaureate	French
Baccalaureate	Industrial Technology
Baccalaureate	Speech Communication
Baccalaureate	Liberal Studies
Baccalaureate	General Recreation
Baccalaureate	Earth Science
Baccalaureate	Geography
Baccalaureate	Tourism
Specialist	Curriculum and Instruction

MDHE staff accepted the justifications provided by the University of Central Missouri University for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Computer Science	BS	• Shares courses/faculty • Other: Strong enrollments
Occupational Health & Safety	BS	• Shares courses/faculty • Unique need
Economics	BA, BS	• Shares courses/faculty • Other: Strong enrollments

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Spanish	BSE	• Shares courses/faculty • Other: Collaboration

Crisis & Disaster Management	BS	• Shares courses/faculty • Other: Articulation agreements
Occupational Education	BS	• Critical to mission • Shares courses/faculty • Unique need • Interdisciplinary
Mathematics	BS	• Shared courses/faculty • Other: Development plan
Chemistry	BA, BS	• Shared courses/faculty • Other: Strong enrollments
Studio Art	BFA	• Shared courses/faculty • Other: Strong enrollments
Actuarial Science & Mathematics	BS	• Shared courses/faculty • Unique need • Other: Strong enrollments
Medical Technology	BS	• Shared courses/faculty • Unique need • Other: Conducting curriculum review
Industrial Hygiene	MS	• Shares courses/faculty • Unique need
Mathematics	MS	• Other: External funding
Psychology	MS	• Other: Development plan
Theatre	MA	• Other: Strong enrollments
Music	MA	• Other: Strong enrollments
History	MA	• Other: Strong enrollment

University of Missouri–Columbia
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 58 programs that fell below the productivity threshold. The institution identified 16 additional programs below the productivity threshold. Five programs should not have been included, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE asked officials at the University of Missouri–Columbia to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Baccalaureate	Linguistics	6.7
Baccalaureate	Agricultural Journalism	6.7
Baccalaureate	Food Science and Nutrition	9.7
Baccalaureate	Russian	5.3
Baccalaureate	German	7.7
Baccalaureate	French	6.0
Baccalaureate	Environmental Geology	2.0
Baccalaureate	Clinical Laboratory Sciences	6.3*
Baccalaureate	Computer Science	9.3*
Baccalaureate	Educational Studies	3.3
Baccalaureate	Statistics	7.3
Baccalaureate	Geological Sciences	6.0
Doctoral	Neuroscience	2.0
Doctoral	Genetics Area Program	1.0
Doctoral	Pathobiology Area Program	5.3
Doctoral	Informatics	none
Doctoral	Food Science	1.0
Doctoral	Agricultural Education	2.7

Doctoral	Exercise Physiology	0.3*
Doctoral	Industrial Engineering	1.0
Doctoral	Romance Language	2.0
Doctoral	Classical Studies	0.7*
Doctoral	Biomedical Sciences	2.7
Doctoral	Nutrition Area Program	1.0*
Doctoral	Soil, Environmental & Atmospheric Science	2.0
Doctoral	Geology	1.0
Doctoral	Anthropology	2.5
Doctoral	Art History and Archaeology	1.5
Doctoral	Sociology/Rural Sociology	2.3
Doctoral	Theatre	2.0*
Doctoral	Communication Science & Disorders	none
Doctoral	Pharmacology	1.0
Doctoral	Forestry	2.7
Doctoral	Special Education	1.7
Doctoral	Accountancy	2.0
Masters	Agricultural Economics	4.7
Masters	Communication	1.0
Masters	Chemical Engineering	1.0
Masters	Computer Engineering	4.0
Masters	Personal Financial Planning	3.3
Masters	Textile & Apparel Mgmt	2.3
Masters	Biological Sciences	3.7
Masters	Biochemistry	2.7
Masters	Neuroscience	1.0
Masters	Pathology	0.3*
Masters	Chemistry	4.7
Masters	Public Health	1.3*

Masters	Natural Resources	none
Masters	Exercise Physiology	2.9
Masters	Russian & Slavonic Studies	2.0
Masters	German	3.7
Masters	French	3.3
Masters	Spanish	4.7
Masters	Classical Languages	3.7
Masters	Architectural Studies	4.0
Masters	Microbiology (Medicine)	1.3*
Masters	Physiology (Medicine)	2.0
Masters	Nutrition Area Program	1.5
Masters	Religious Studies	3.0
Masters	Anthropology	4.3
Masters	Geography	3.7
Masters	Rural Sociology	3.7
Masters	Theatre	1.0
Masters	Art	3.7
Masters	Pharmacology	none
Masters	Forestry	4.0
Post Bacc.	Educational Leadership (coop. W/UMR/CMSU)	none
Post Bacc.	Special Education	none
Post Bacc.	Career & Technical Education	None
Total	**69**	

Of these, the University of Missouri-Columbia identified ten programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Ed. Specialist	Special Education
Ed. Specialist	Career and Technical Education

Masters	Natural Resources
Doctoral	Forestry
Masters	Exercise Physiology
Doctoral	Communication Science & Disorders
Baccalaureate	Clinical Laboratory Sciences
Baccalaureate	Environmental Geology
Doctoral	Soil, Environmental & Atmospheric Science
Doctoral	Forestry

In addition, the institution intends to merge or discontinue the programs listed in the table below, contingent on the approval of a new program.

Programs projected to be merged or discontinued		
Program name	**Degree**	**Explanation/action taken**
Exercise Physiology	MS	The Exercise Physiology MS and Nutritional Area Program MS will be discontinued contingent on the approval of a new MS program.
French	BA	Will be discontinued contingent on approval of new Romance Languages BA
French	MA	Will be discontinued contingent on approval of new Romance Languages MA
Spanish	MA	Will be discontinued contingent on approval of new Romance Languages MA
Physiology (Medicine)	MS	The Pharmacology MS and the Physiology MS will be discontinued contingent on the approval of a new MS program.
Nutrition Area Program	MS	The Exercise Physiology MS and Nutritional Area Program MS will be discontinued contingent on the approval of a new MS program
Pharmacology	PHD	The Pharmacology Ph.D. and the Physiology Ph.D. will be discontinued contingent on the approval of a new Ph.D. program.
Pharmacology	MS	The Pharmacology MS and the Physiology MS will be discontinued contingent on the approval of a new MS program.
Forestry	MS	The Forestry MS, the Parks, Recreation & Tourism MS, and the SEAS MS will be discontinued contingent on the approval of a new MS program.

MDHE staff accepted the justifications provided by the University of Missouri-Columbia for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Agricultural Economics	MS	• Masters program tied to a productive Ph.D. program
Communication	MA	• Masters program tied to a productive Ph.D. program
Educational Leadership (coop. UMR/CMSU)	EDSP	• Program tied to a productive Ph.D. program
Chemical Engineering	MS	• Masters program tied to a productive Ph.D. program
Computer Engineering	MS	• Masters program tied to a productive Ph.D. program
Personal Financial Planning	MA,MS	• Masters program tied to a productive Ph.D. program
Textile & Apparel Mgmt	MA,MS	• Masters program tied to a productive Ph.D. program
Biological Sciences	MA	• Masters program tied to a productive Ph.D. program
Biochemistry	MS	• Masters program tied to a productive Ph.D. program
Pathology	MS	• Masters program tied to a productive Ph.D. program
Chemistry	MS	• Masters program tied to a productive Ph.D. program
Neuroscience	PHD	• Interdisciplinary • Shares Courses/Faculty
Neuroscience	MS	• Interdisciplinary • Shares Courses/Faculty
Genetics Area Program	PHD	• Interdisciplinary • Shares Courses/Faculty
Public Health	MS	• Unique Need • Other: External Funding
Linguistics	BA	• Interdisciplinary
Food Science and Nutrition	BS	• Mission Critical • Reconfiguration underway
Industrial Engineering	PHD	• Unique Need • Mission Critical • Other: Development Plan
Romance Language	PHD	• Other: Development Plan
Russian	BA	• Mission Critical • Unique Need
Russian & Slavonic Studies	MA	• Mission Critical • Unique Need
German	BA	• Shared Courses and Faculty • Other: Development Plan
German	MA	• Shares courses/faculty • Other: Supports study abroad; strong enrollments; developmental plan in place

Classical Studies	PHD	• Other: Consortium Agreement
Classical Languages	MA	• Other: Consortium Agreement
Architectural Studies	MA,MS	• Masters program tied to strong PhD program • Other: Strong enrollments
Microbiology (Medicine)	MS	• Masters program tied to strong PhD program
Biomedical Sciences	PHD	• External funding • Other: strong enrollments
Nutrition Area Program	PHD	• Interdisciplinary • Unique Need
Sociology/Rural Sociology	PHD	• Incorrect Data-meets productivity threshold • Interdisciplinary
Rural Sociology	MS	• Masters program tied to a productive Ph.D. program
Religious Studies	MA	• Interdisciplinary • Supports General Education • Shares faculty • Unique need
Computer Science	BACS	• Shares Courses • Other: STEM field
Educational Studies	BSE	• Shares Courses/Faculty
Special Education	PHD,EDD	• Mission Critical • Unique Need • Other: Strong enrollments
Statistics	BA,BS	• Other: Strong enrollments; plan for development
Accountancy	PHD	• Mission Critical • Unique Program

MDHE staff recommends that the programs listed below be retained and undergo a follow-up evaluation in three years.

Program name	Degree	Brief summary of justifications
Agricultural Journalism	BS	• Mission Critical • Reconfiguration underway
Food Science	PHD	• Mission Critical • Reconfiguration underway
Agricultural Education	PHD	• Program provides unique access • Program meets a unique need
Exercise Physiology	PHD	• Mission Critical • Unique Access • Other: Reconfiguration/ Development Plan
Geology	PHD	• Other: Reconfiguration/Development Plan; External Funding
Anthropology	PHD	• Other: Development Plan

Anthropology	MA	• Other: Development Plan
Art History and Archaeology	PHD	• Other: Development Plan
Geography	MA	• Mission Critical • Unique Need • Other: Reconfiguration/Development Plan
Theatre	PHD	• Shares Courses/Faculty • Graduated 21 PhD students and 11 MA students over past 10 years
Theatre	MA	• Shares Courses/Faculty • Graduated 21 PhD students and 11 MA students over past 10 years
Art	MFA	• Supports other Programs • Other: Development Plan
Geological Sciences	BA,BS	• Mission Critical • Supports other Programs

UNIVERSITY of MISSOURI–KANSAS CITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 34 programs that fell below the productivity threshold.

The MDHE asked officials at the University of Missouri–Kansas City to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Baccalaureate	American Studies	2.3
Baccalaureate	Art	2.0
Baccalaureate	Art History	6.7
Baccalaureate	French	3.7
Baccalaureate	Geography	5.0
Baccalaureate	Geology	5.0
Baccalaureate	German	2.7
Baccalaureate	Information Technology	8.0
Baccalaureate	Mathematics and Statistics	9.6
Baccalaureate	Medical Technology	2.0
Baccalaureate	Middle School Education	9.3
Baccalaureate	Music Composition	6.0
Baccalaureate	Pharmaceutical Sciences	7.7
Baccalaureate	Physics	3.3
Baccalaureate	Theatre	6.7
Baccalaureate	Urban Planning and Design	6.0
Baccalaureate	Urban Studies	3.7
EdD	Curriculum and Instruction	2.5
EdSp	Curriculum and Instruction	2.0
EdSp	Reading Education	4.7

Masters	Chemical Engineering	None
Masters	Chemistry	1.3
Masters	Dental Hygiene Education	3.0
Masters	Environmental and Urban Studies	2.0
Masters	Industrial Engineering	None
Masters	Nuclear Engineering	None
Masters	Oral Biology	3.7
Masters	Pharmaceutical Science	1.7
Masters	Physics	3.7
Masters	Political Science	1.7
Masters	Psychology	3.7
Masters	Sociology	3.7
Masters	Studio Art	4.5
Masters	Theatre	4.0
TOTAL	**34**	

Of these, UMKC identified four programs for deletion and seven for inactivation. Programs that are inactivated will be deleted after five years unless the institution asks for them to be reactivated.

Programs identified by institution for deletion	
Degree level	**Program name**
Baccalaureate	Pharmaceutical Sciences
Masters	Pharmaceutical Sciences
Baccalaureate	French
Baccalaureate	German
Baccalaureate	Spanish (not on low-productivity list)

Although UMKC intends to delete three foreign language programs, it also intends to submit a proposal for a new program in Foreign Language, with concentrations available in German, French, and Spanish.

Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated)	
Degree level	**Program name**
Baccalaureate	American Studies
Baccalaureate	Art
Baccalaureate	Medical Technology
EdD	Curriculum and Instruction
Masters	Chemical Engineering
Masters	Industrial Engineering
Masters	Nuclear Engineering

MDHE staff accepted the justifications provided by UMKC for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Art History	BA	• Mission critical • Supports other programs • Other: Collaboration with Nelson-Atkins Museum of Art and other prominent art institutions
Geography	BA/BS	• Mission critical • Supports other programs • Shared courses/faculty
Geology	BA	• Mission critical • Supports other programs • Shared courses/faculty
Mathematics and Statistics	BA/BS	• Mission critical • Supports other programs
Music Composition	BA	• Mission critical
Physics	BA/BS	• Mission critical • Supports other programs
Theatre	BA	• Mission critical
Urban Planning and Design	BA	• Mission critical • Supports other programs • Unique need
Urban Studies	BA	• Mission critical • Supports other programs • Interdisciplinary

Program title	Degree	Brief summary of justifications
		• Underserved access
Curriculum and Instruction	EdSp	• Shared courses/faculty
Reading Education	EdSp	• Shared courses/faculty • Underserved access • Other: Significant number of students already have an advanced degree and are therefore only seeking certification in this subject
Chemistry	MS	• Mission critical • Supports other programs
Dental Hygiene Education	MSDH	• Shared courses/faculty • Unique need
Environmental and Urban Studies	MS	• Mission critical • Supports other programs
Oral Biology	MS	• Mission critical • Supports other programs • Interdisciplinary • Unique need
Physics	MS	• Interdisciplinary • Shared courses/faculty
Studio Art	MA	• Mission critical • Other: MA students provide support to strong BA program, collaboration with Nelson-Atkins Museum of Art and other prominent institutions
Theatre	MA	• Mission critical • Shared courses/faculty

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	Degree	Brief summary of justifications
Information Technology	BS	• Mission critical • Shared courses/faculty • Unique need • Other: Development plan; unique accreditation
Middle School Education	BSE	• Shared courses/faculty • Unique need
Political Science	MA	• Supports other programs • Interdisciplinary
Psychology	MA	• Mission critical • Supports other programs
Sociology	MA	• Mission critical • Supports other programs

University of Missouri–St. Louis
Statewide Review of Academic Programs

<u>Summary Report</u>

In the initial phase of the review, MDHE staff identified 16 programs that fell below the productivity threshold. Four programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded. Two programs had been renamed, but the changes not been made in the MDHE program inventory.

The MDHE requested officials at the University of Missouri–St. Louis to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average number of graduates for three previous years
Baccalaureate	Educational Studies	6.0
Baccalaureate	Music Education	8.3
Baccalaureate	German	2.0
Baccalaureate	French	7.7
Baccalaureate	Spanish	8.7
Baccalaureate	Philosophy	7.3
Baccalaureate	Physics	6.3
Masters	Sociology	4.3
Doctoral	Political Science	2.3
Baccalaureate	Music	6.7
TOTAL	10	

Of these, UMSL identified five for deletion and one for inactivation.

Programs identified by institution for deletion	
Degree level	Program name
Baccalaureate	Music Education
Baccalaureate	German
Baccalaureate	French
Baccalaureate	Spanish
Baccalaureate	Music

Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated)	
Degree level	Program name
Masters	Sociology

Although UMSL intends to delete three foreign language programs, it also intends to submit a proposal for a new program in Foreign Language, with concentrations available in German, French, and Spanish.

MDHE staff recommends that the Philosophy program justifications be accepted, but that the program undergo a follow-up review in three years. MDHE staff accepted the justifications provided by UMSL for the remaining programs (see table below).

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Educational Studies	BA	• Mission critical • Supports other programs • Shared faculty/courses • Other: no unique courses for program; helps attract international students; degree completion program for many returning students.
Physics	BA/BS	• Mission critical • Shared faculty/courses • Other: Development plan; curricular changes made; collaborating with other institutions course delivery
Philosophy	BA	• Mission critical • Supports other programs • Other: little or no savings if deleted
Political Science	PhD	• Mission critical • Other: averaged 3.2 over past six years; currently 40 majors.

Programs recommended for follow-up review in three years	
Program title	**Degree**
Philosophy	BA

Institutional Summary Reports

2-year Sector

Crowder College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 42 programs that fell below the productivity threshold. Fourteen programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or they had data that had been misreported or miscoded.

The MDHE asked officials at Crowder College to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Associate	Accounting	1.7
Associate	Agri-Business Technology	0.3
Associate	Agri-Equipment/ Diesel Technology	none
Associate	Automotive Technology	1.7
Associate	Computer & Network Support Technology	1.0
Associate	Construction Technology	1.3
Associate	Drafting and Design Technology	3.3
Associate	Environmental Health Technology	none
Associate	Fire Science Technology	1.7
Associate	Industrial Technology	none
Associate	Occupational Education	none
Associate	Paramedical Science	1.3
Associate	Poultry Science	none
Associate	Pre-Engineering Alternative Energy	2.0
Certificate	Auto Mechanics	1.0
Certificate	Construction Technology	none
Certificate	Diesel Technology	none
Certificate	Electronics Technology	none

Certificate	Emergency Medical Technician	none
Certificate	Emergency Medical Technician	none
Certificate	Environmental Health	0.3
Certificate	Fire Science	none
Certificate	Hazardous Materials Technology	none
Certificate	Industrial Technology	0.7
Certificate	Office Administration-Office Assistant	0.7
Certificate	Office Administration-Office Assistant	0.7
Certificate	Teaching English to Speakers	none
Certificate	Water & Wastewater Technology	none
Total	**28**	

Of these, Crowder College identified six programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Associate	Agri-Business Technology
Associate	Construction Technology
Associate	Poultry Science
Certificate	Electronics Technology
Certificate	Hazardous Materials Technology
Certificate	Water & Wastewater Technology

MDHE staff accepted the justifications provided by Crowder College for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Accounting	AAS	• Supports general education • Development plan
Automotive Technology	AAS	• Shared faculty/resources • Consortium
Computer & Network Support Technology	AAS	• Graduates reported under incorrect CIP
Drafting and Design Technology	AAS	• Shared faculty/resources • Consortium
Environmental Health Technology	AAS	• Unique need • Development plan
Fire Science Technology	AAS	• Shared faculty/resources • Consortium
Occupational Education	AAS	• Shared faculty/resources • Consortium
Pre-Engineering Alternative Energy	AS	• Shared faculty/resources
Office Administration-Office Assistant	C0	• Shared faculty/resources
Construction Technology	C1	• Shared faculty/resources
Fire Science	C1	• Shared faculty/resources • Consortium
Office Administration-Office Assistant	C1	• Shared faculty/resources
Environmental Health	C2	• Unique need • Development plan

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Agri-Equipment/ Diesel Technology	AAS	• Other: Program has implemented strategic plans to improve program
Industrial Technology	AAS	• Other: Program has implemented strategic plans to improve program • Grant funds
Paramedical Science	AAS	• Other: Program has implemented strategic plans to improve program
Emergency Medical Technician	C0	• Other: Program has implemented strategic plans to improve program
Auto Mechanics	C1	• Other: Program has implemented strategic plans to improve program • Shared faculty/resources • Unique to region
Diesel Technology	C1	• Market demand • Other: Program has implemented strategic plans to improve program
Emergency Medical Technician	C1	• Other: Program has implemented strategic plans to improve program
Industrial Technology	C1	• Other: Program has implemented strategic plans to improve program • Grant funds
Teaching English to Speakers	Post baccalaureate	• Program recently reactivated

East Central College
Statewide Review of Academic Programs

<u>Summary Report</u>

MDHE staff identified 16 programs that fell below the productivity threshold. One program should not have been on the list because it had been approved within the past five years and had not had sufficient time to demonstrate viability.

The MDHE asked officials at East Central College to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Associate	Occupational Education	0.7
Associate	Para Educator	0.3
Associate	Apprenticeship Training	0.3
Associate	Radiologic Technology	3.3
Associate	Early Childhood Education	0.3
Associate	Criminal Justice	0.7
Associate, Certificate	Computer Information Systems	2.3
Associate, Certificate	Fire Technology	3.7
Associate, Certificate	Building Construction Technology	2.7
Associate, Certificate	Welding	1.7
Certificate	Medical Secretarial/Transcription	None
Certificate	Computer Integrated Manufacturing	None
Certificate	Floral Design	None
Certificate	Solution Developer	None
Associate	Nursing-LPN Bridge Program	None
Total	**15**	

Of these, East Central College identified six programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Associate	Early Childhood Education
Associate	Criminal Justice
Certificate	Computer Integrated Manufacturing
Certificate	Floral Design
Certificate	Solution Developer
Associate	Nursing-LPN Bridge Program

The MDHE requested follow-up material for the programs listed below but the materials have not yet been received. East Central College's review of academic programs is therefore incomplete.

Programs requiring further review by MDHE Staff	
Program title	**Degree**
Occupational Education	Associate
Para Educator	Associate
Apprenticeship Training	Associate
Radiologic Technology	Associate
Computer Information Systems	Associate, Certificate
Fire Technology	Associate, Certificate
Building Construction Technology	Associate, Certificate
Welding	Associate, Certificate
Medical Secretarial/Transcription	Certificate

Jefferson College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 10 programs that fell below the productivity threshold.

The MDHE asked officials at the Jefferson College to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Associate	Apprenticeship Training	2.3
Associate	Civil/Construction Technology	none
Associate	Engineering	2.0
Certificate	Accounting Technology	4.7
Certificate	Certified Nurse Aide	none
Certificate	Civil/Construction Technology	none
Certificate	Computer Information Systems	none
Certificate	Medication Technician	none
Certificate	Police Training Institute	none
Certificate	Unit Secretary	none
Total	**10**	

Of these, Jefferson College identified five programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Associate	Civil/Construction Technology
Certificate	Civil/Construction Technology
Certificate	Computer Information Systems
Certificate	Police Training Institute
Certificate	Unit Secretary

MDHE staff accepted the justifications provided by Jefferson College for the programs listed in the table below.

Program Justifications Accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Apprenticeship Training	AAS	• Supports general education • Unique need • Other: 15 students enrolled for the Spring 2011 semester
Engineering	AS	• Supports general education • Unique need
Certified Nurse Aide	C0	• Unique need • Other: Program was recently reactivated on campus
Medication Technician	C0	• Unique need

MDHE staff recommends that the program listed below be retained and undergo a follow-up review in three years.

Program recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Accounting Technology	C1	• Supports general education • Shared courses/faculty

Linn State Technical College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified four programs that fell below the productivity threshold. One program should not have been included because it had been approved within the past five years and has not had sufficient time to demonstrate viability.

The MDHE asked officials at Linn State Technical College to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Associate	Industrial Maintenance Technology	none
Associate	Occupational Education	none
Certificate	Aviation Maintenance Airframe	2.0
Total	3	

Of these, Linn State Technical College identified one program for deletion.

Programs to be deleted	
Degree level	Program name
Associate	Occupational Education

MDHE staff accepted the justifications provided by Linn State Technical College for the remaining programs (see table below).

Program justifications accepted by MDHE		
Program title	Degree	Brief summary of justifications
Industrial Maintenance Technology	AAS	• Cost recovery program • Local employer demand for the program
Aviation Maintenance Airframe	C1	• Shared courses/faculty

Metropolitan Community College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 33 programs that fell below the productivity threshold. Ten programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or had data that had been misreported or miscoded.

The MDHE asked officials at Metropolitan Community College to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Associate	Apparel & Textiles - Design and Production	3.3
Associate	Apparel & Textiles- Merchandising and Marketing	3.3
Associate	Associate in Science, Biology	none
Associate	Associate in Science, Chemistry	none
Associate	Environmental Health & Safety	1.0
Associate	Land Surveying	0.7
Associate	Occupational Education	0.3
Associate	Paraprofessional Educator	none
Associate	Quality Assurance Technology	0.3
Associate	Telecommunications Technology	none
Certificate	Collision Repair Technology	0.3
Certificate	Computer Support Technician	none
Certificate	Computer Support Technology I	2.0
Certificate	Database Programming (ACCESS)	0.3
Certificate	Geographic Information Systems	none
Certificate	Interactive Digital Media I	none
Certificate	Interactive Digital Media I	none
Certificate	Interactive Digital Media II	none

Certificate	Land Surveying	0.7
Certificate	Telecommunications Technician I	none
Certificate	Telecommunications Technician II	none
Certificate	Youth Development Worker	none
Certificate	Youth Work	none
Total	**23**	

Of these, Metropolitan Community College identified 11 programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Associate	Paraprofessional Educator
Associate	Quality Assurance Technology
Associate	Telecommunications Technology
Certificate	Computer Support Technician
Certificate	Computer Support Technology I
Certificate	Database Programming (ACCESS) Certificate
Certificate	Interactive Digital Media I
Certificate	Interactive Digital Media I
Certificate	Interactive Digital Media II
Certificate	Telecommunications Technician I
Certificate	Telecommunications Technician II

MDHE staff accepted the justifications provided by Metropolitan Community College for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Apparel & Textiles-Merchandising and Marketing	AAS	• Other: Program was reported under two CIP codes; when combined program exceeds threshold
Apparel & Textiles-Design and Production	AAS	• Other: Program was reported under two CIP codes; when combined, program exceeds threshold

Environmental Health & Safety	AAS	• Shared courses/faculty
Land Surveying	AAS	• Shared courses/faculty
Occupational Education	AAS	• Shared courses/faculty
Associate in Science, Biology	AS	• Shared courses/faculty
Associate in Science, Chemistry	AS	• Shared courses/faculty
Youth Development Worker	C0	• Shared courses/faculty • Other: Development plan
Collision Repair Technology	C1	• Shared courses/faculty
Geographic Information Systems	C1	• Shared courses/faculty
Land Surveying	C1	• Shared courses/faculty
Youth Work	C1	• Shared courses/faculty

Mineral Area College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified seven programs that fell below the productivity threshold.

The MDHE asked officials at the Mineral Area College to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Associate	Agri-Business	3.0
Associate	Radio TV Broadcasting	1.0
Associate, Certificate	Culinary Arts	0.3
Associate, Certificate	Graphic Arts Printing Technology	4.7
Associate, Certificates	Horticulture Services/Operations Technology	1.7
Certificate	Floral Design	1.3
Certificate	Viticulture	none
Total	7	

Of these, Mineral Area College identified three programs to be placed on inactive status.

Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated)	
Degree level	Program name
Associate, Certificate	Culinary Arts
Certificate	Floral Design
Certificate	Viticulture

MDHE staff accepted the justifications provided by Mineral Area College for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Agri-Business	AAS	• Supports general education • Shared courses/faculty
Radio TV Broadcasting	AAS	• Unique need • Other: Collaborative program with local area career and technology centers
Graphic Arts Printing Technology	AAS, C1	• Unique need • Other: Collaborative program with local area career and technology centers
Horticulture Services/Operations Technician	AAS, C1	• Supports general education. • Shared courses/faculty

Missouri State University--West Plains
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 14 programs that fell below the productivity threshold. Four programs should not have been included in the list because they had been approved within the past five years and have not had sufficient time to demonstrate viability.

The MDHE asked officials at Missouri State University--West Plains to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Associate	Business	4.7
Associate	Computer Technology	1.0
Associate	Enology	none
Associate	Fire Science Technology	0.7
Associate	General Technology	0.7
Associate	Law Enforcement	1.7
Associate	Viticulture	none
Certificate	Enology	none
Certificate	Technology Management	none
Certificate	Viticulture	0.3
Total	10	

Of these, Missouri State University--West Plains identified one program for inactivation.

Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated)	
Degree level	Program name
Associate	Fire Science Technology

MDHE staff accepted the justifications provided by Missouri State University--West Plains for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Computer Technology	AAS	• Shared courses/faculty • Other: Development plan
Technology Management	C1	• Other: Development plan

The MDHE requested follow-up material for the programs listed below but the materials have not yet been received.

Programs requiring further review by MDHE staff	
Program title	**Degree**
Business	Associate
Enology	Associate
General Technology	Associate
Law Enforcement	Associate
Viticulture	Associate
Enology	Certificate
Viticulture	Certificate

Moberly Area Community College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 10 programs that fell below the productivity threshold. Three programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or had data that had been misreported or miscoded.

The MDHE asked officials at Moberly Area Community College to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Associate	Business Accounting Technology	4.3
Associate	Drafting Design Technology	3.3
Associate	Marketing/Management	2.3
Associate	Welding and Metals Technology	1.0
Certificate	Drafting Design Technology	none
Certificate	Marketing/Management	0.3
Certificate	Welding and Metals Technology	none
Total	7	

MDHE staff accepted the justifications provided by Moberly Area Community College for the programs listed below.

Program justifications accepted by MDHE		
Program title	Degree	Brief summary of justifications
Drafting Design Technology	AAS	• Supports general education • Unique need
Welding and Metals Technology	AAS	• Other: Significant increase in enrollments • Demand
Drafting Design Technology	C1	• Shared courses/faculty
Welding and Metals Technology	C1	• Other: Significant increase in enrollments • Demand

MDHE staff recommends that the three programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Business Accounting Technology	AAS	• Supports general education • Other: Program expanded to a new site and began offering the program virtually in Fall 2009
Marketing/Management	AAS	• Supports general education • Other: Program will be expanding to a new site and is now offering courses for the program web-synchronously • Other: Institution has recently implemented new strategies to assist in student retention
Marketing/Management	C1	• Supports general education • Other: Program will be expanding to a new site and is now offering courses for the program web-synchronously • Other: Institution has recently implemented new strategies to assist in student retention

North Central Missouri College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 29 programs that fell below the productivity threshold. Nine programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or had data that had been misreported or miscoded.

The MDHE asked officials at North Central Missouri College to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Associate	Information Technologies	3.7
Certificate	Information Technologies	3.0
Associate	Manufacturing Skill Standards Council-Pro	1.3
Certificate	Manufacturing Skills Standards Council-Pro	none
Associate	Technical Teacher Education	0.3
Certificate	Equine Management	none
Certificate	Equine Management	none
Associate	Construction Technology	0.3
Certificate	Construction Technology	none
Associate	Criminal Justice	4.7
Certificate	Criminal Justice	none
Associate, Certificate	E-Business Management and Commerce	0.3
Associate	Business Technology	1.7
Certificate	Business Technology	0.7
Certificate	Marketing Management	none
Certificate	Medical Ins. & Billing Specialist	1.3
Certificate	Medical Transcriptionist	3.0
Certificate	Medical Assistant	4.0

Certificate	Medical Assistant	0.3
Associate	Emergency Medical Technology	1.7
Total	**20**	

Of these, North Central Missouri College identified five programs for deletion and five for inactivation.

Programs identified by institution for deletion	
Degree level	**Program name**
Associate	Manufacturing Skill Standards Council-Pro
Associate	Technical Teacher Education
Associate, Certificate	E-Business Management and Commerce
Certificate	Manufacturing Skills Standards Council-Pro
Certificate	Equine Management

Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated)	
Degree level	**Program name**
Associate	Information Technologies
Associate	Construction Technology
Certificate	Information Technologies
Certificate	Construction Technology
Certificate	Equine Management

MDHE staff accepted the justifications provided by North Central Missouri College for the programs listed in the table below.

Program justifications approved by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Business Technology	AAS	• Supports general education
Business Technology	C1	• Supports general education
Marketing Management	C1	• Shared courses/faculty

Medical Ins. & Billing Specialist	C1	• Supports general education/other programs • Shared courses/faculty • Unique need
Medical Transcriptionist	C1	• Supports general education • Unique need
Medical Assistant	AAS	• Supports general education • Shared courses/faculty • Unique need
Medical Assistant	C1	• Supports general education • Shared courses/faculty • Unique need
Emergency Medical Technology	AAS	• Supports general education • Shared courses/faculty • Unique need

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Degree	**Program title**	**Brief summary of justifications**
Associate	Criminal Justice	• Other: Institution has created a plan to increase recruitment and retention
Certificate	Criminal Justice	• Other: Institution has created a plan to increase recruitment and retention

Ozarks Technical Community College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 14 programs that fell below the productivity threshold. Ten programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or they had data that had been misreported or miscoded. One program had previously been renamed, but the change had not been made in the MDHE program inventory.

The MDHE asked officials at Ozarks Technical Community College to provide justifications for these three programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Associate	Industrial Electronics Technology	3.0
Certificate	Industrial Electronics Technology	3.0
Certificate	Certified Nurse Aide	none
Total	3	

Of these, OTC identified the Industrial Electronics Technology program for deletion.

Programs identified by institution for deletion	
Degree level	Program name
Associate	Industrial Electronics Technology
Certificate	Industrial Electronics Technology

MDHE staff accepted the justifications provided by Ozarks Technical Community College for the remaining program.

Program justifications accepted by MDHE		
Program title	Degree	Brief summary of justifications
Certified Nurse Aide	Certificate	• Non-credit bearing course; no EMSAS data • Institutional data indicates that program meets average graduate threshold

St. Charles Community College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 28 programs that fell below the productivity threshold. Seven programs should not have been included in the list, either because they have been approved within the past five years and have not had sufficient time to demonstrate viability, or they had data that had been misreported or miscoded.

The MDHE asked officials at St. Charles Community College to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Associate	Environmental Science	none
Associate	Education Paraprofessional	0.7
Associate	Pre-engineering	2.3
Associate	Electronics Engineering Technology	0.3
Associate	Criminal Justice	2.7
Associate	Technology	0.3
Associate	Human Services Assistant	2.0
Associate	Industrial Maintenance Technology	none
Associate	Skilled Trades industrial Apprenticeship	1.3
Associate	Graphic Design	none
Associate	Medical Transcription	none
Associate	Massage Therapy	none
Associate	Computer Science	none
Certificate	Programming Languages	none
Certificate	Network Design	none
Certificate	Computer Applications	none
Certificate	Criminal Justice	0.3
Certificate	Customer Service	none

Certificate	Desktop Publishing	none
Certificate	Clerical Assistant	none
Certificate	Advanced Networking	none
TOTAL	**21**	

Of these, St. Charles Community College identified five programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Associate	Environmental Science
Associate	Electronics Engineering Technology
Associate	Industrial Maintenance Technology
Associate	Medical Transcription
Associate	Massage Therapy

MDHE staff accepted the justifications provided by St. Charles Community College for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Education Paraprofessional	AAS	• Shared courses/faculty
Criminal Justice	AAS	• Shared courses/faculty • Unique need
Technology	AAS	• Shared courses/faculty
Human Services Assistant	AAS	• Shared courses/faculty • Other: External funding would be jeopardized by program closure.
Skilled Trades industrial Apprenticeship	AAS	• Shared courses/faculty (no unique courses) • Other: Articulation agreements
Graphic Design	AAS	• Shared courses/faculty • Other: External funding would be jeopardized by program closure.
Pre-engineering	AS	• Enrollment numbers
Programming Languages	C1	• Shared courses/faculty.
Network Design	C1	• Shared courses/faculty
Computer Applications	C1	• Shared courses/faculty

Criminal Justice	C1	• Shared courses/faculty • Unique need
Customer Service	C1	• Shared courses/faculty
Desktop Publishing	C1	• Shared courses/faculty
Clerical Assistant	C1	• Shared courses/faculty
Computer Science	AAS	• Other: reported under wrong CIP code
Advanced Networking	C1	• Other: reported under wrong CIP code

St. Louis Community College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 28 programs that fell below the productivity threshold. One program should not have been included in the list because it had been approved within the past five years and has not had sufficient time to demonstrate viability.

The MDHE asked officials at St. Louis Community College to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Associate	Occupational Education (collab. CMSU, SMSU)	none
Associate	Civil Engineering Technology	1.3
Associate	Electrical/Electronic Engineering Technology	4.3
Associate	Robotics Technology	0.3
Associate	Manufacturing Technology	1.3
Associate	Mechanical Engineering Technology	1.7
Associate	Construction Management Technology	2.0
Associate	Chemical Technology	4.7
Associate	Skilled Trades Industrial Apprenticeship	0.7
Associate, Certificate	Information Reporting Technology,	3.3
Associate, Certificate	Building Inspection & Code Enforcement	3.3
Associate, Certificate	Diesel Technology, Diesel Technology	2.3
Associate, Certificate	Sales	3.7
Certificate	Multimedia	1.0
Certificate	Information Reporting Technology	1.3
Certificate	Microcomputer Applications (110301)	2.0
Certificate	Database Developer	1.0
Certificate	Microcomputer Applications (110601)	none

Certificate	Web Development	2.0
Certificate	Voice Data Communications, Voice Data Communications Analyst	0.3
Certificate	Information Technology-Network Administrator	3.3
Certificate	Computer Aided Design	3.3
Certificate	Technical Business Communications	none
Certificate	Lead Maintenance Mechanic	none
Certificate	Medical Transcription	1.7
Certificate	Phlebotomy	3.3
Certificate	Construction Office Management	3.0
Total	**27**	

Of these, St. Louis Community College identified one program for deletion, and identified six programs it will consider placing on inactive status.

Programs identified by institution for deletion	
Degree level	**Program name**
Associate	Skilled Trades Industrial Apprenticeship

Programs to be considered by institution for inactivation (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated)	
Degree level	**Program name**
Certificate	Multimedia
Certificate	Microcomputer Applications
Certificate	Database Developer
Certificate	Microcomputer Applications
Certificate	Voice Data Communications, Voice Data Communications Analyst
Certificate	Medical Transcription

MDHE staff accepted the justifications provided by St. Louis Community College for the programs listed in the table below.

Program justifications approved by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Chemical Technology	AAS	• Other: Employer demand
Information Reporting Technology	AAS, C1	• Other: Employer demand
Web Development	C0	• Shared courses/faculty
Construction Office Management	C0	• Shared courses/faculty

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

Programs recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Information Technology-Network Administrator	C1	• Shared courses/faculty

The MDHE requested additional documentation and justification for the programs listed below. St. Louis Community College's response indicated that these programs would undergo an internal review in the coming year. The MDHE's review is therefore incomplete, pending the outcome of the institution's internal review.

Programs requiring further review by MDHE Staff	
Program title	**Degree**
Civil Engineering Technology	AAS
Electrical/Electronic Engineering Technology	AAS
Robotics Technology	AAS
Manufacturing Technology	AAS
Mechanical Engineering Technology	AAS
Construction Management Technology	AAS
Occupational Education (collab. CMSU, SMSU)	AAS
Sales	AAS, C0

Diesel Technology, Diesel Technology	AAS, C0, C1
Building Inspection & Code Enforcement	AAS, C1
Building Inspection & Code Enforcement	AAS, C1
Computer Aided Design	C0
Lead Maintenance Mechanic	C0
Phlebotomy	C0
Technical/Bus Communications, Technical Business Communications	C1

State Fair Community College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 10 programs that fell below the productivity threshold. Two programs should not have been included in the list because they had been approved within the past five years and have not had sufficient time to demonstrate viability.

The MDHE asked officials at State Fair Community College to provide justifications for these programs:

Programs identified for further review		
Degree level	Program name	Average annual number of graduates for three previous years
Associate	Web Development	3.0
Associate	Occupational Education	none
Associate	Fire Science Technology	none
Associate	Building Materials Merchandising	0.7
Associate, Certificate	Marine Technology	0.7
Associate, Certificate	Machine Tool Technology	3.3
Certificate	Welding Technology	4.0
Certificate	Industrial Management	none
TOTAL	8	

Of these, State Fair Community College identified three programs for deletion.

Programs identified by institution for deletion	
Degree level	Program name
Associate	Occupational Education
Associate	Fire Science Technology
Certificate	Industrial Management

MDHE staff accepted the justifications provided by State Fair Community College for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Web Development	AAS	• Shared courses/faculty • Critical to mission • Supports general education
Building Materials Merchandising	AAS	• Shared courses/faculty • Demand
Marine Technology	AAS, C1	• Other: Collaboration
Welding Technology	C1	• Enrollment
Machine Tool Technology	AAS, C1	• Enrollment

Three Rivers Community College
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 17 programs that fell below the productivity threshold. Three programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or they had data that had been misreported or miscoded.

The MDHE asked officials at Three Rivers Community College to provide justifications for these programs:

Programs identified for further review		
Degree level	**Program name**	**Average annual number of graduates for three previous years**
Associate	Agricultural Systems	3.0
Associate	Applied Technology	1.0
Associate	Occupational Education	0.3
Associate, Certificate	EMS - Paramedic	2.0
Certificate	Accounting	0.7
Certificate	Advanced Health Care Technician	none
Certificate	Automated Office Certificate	3.0
Certificate	Electrical Technician	3.3
Certificate	Hospitality and Tourism	1.3
Certificate	Information Publishing	1.0
Certificate	Management and Supervision	1.7
Certificate	Microcomputer Support Technology	2.0
Certificate	Quality Control Technician	1.7
Certificate	Surveying	4.3
TOTAL	**14**	

Of these, Three Rivers Community College identified two programs for deletion.

Programs identified by institution for deletion	
Degree level	**Program name**
Associate	Occupational Education
Certificate	Advanced Health Care Technician

MDHE staff accepted the justifications provided by Three Rivers Community College for the programs listed in the table below.

Program justifications accepted by MDHE		
Program title	**Degree**	**Brief summary of justifications**
Applied Technology	AAS	• Shared courses/faculty
EMS – Paramedic	AAS, C0	• Other: Program has been inactive at the institution, but will be reactivated in summer 2011
Accounting	C0	• Shared courses/faculty
Automated Office Certificate	C0	• Shared courses/faculty
Electrical Technician	C0	• Shared courses/faculty
Hospitality and Tourism	C0	• Shared courses/faculty
Information Publishing	C0	• Shared courses/faculty
Management and Supervision	C0	• Shared courses/faculty
Microcomputer Support Technology	C0	• Shared courses/faculty
Quality Control Technician	C0	• Shared courses/faculty
Surveying	C0	• Shared courses/faculty

MDHE staff recommends that the program listed below be retained and undergo a follow-up review in three years.

Program recommended for follow-up review in three years		
Program title	**Degree**	**Brief summary of justifications**
Agricultural Systems	AAS	• Shared courses/faculty • Other: Institution has plans to improve recruitment and/or retention in development

Appendix A: Governor Nixon's Remarks at Higher Education Summit, August 17, 2010

Once again, thank you for joining your colleagues and me this evening for this higher education summit meeting.

I asked you here for two reasons.

First, having you over for dinner gives me the chance to personally thank you for your **extraordinary** efforts of the past two years.

During some of the most tumultuous economic times in memory, you agreed to hold the line and keep tuition flat for two consecutive years.

No one else in the country managed to do what we have done.

At the same time, all around us, public and private universities were increasing tuition - often by double digits and sometimes by as much as 30 percent. Missouri stood apart from the pack and stood up for affordability and improved student access.

It's not an exaggeration to say that for **thousands** of Missouri families, you kept the dream of a college education alive.

As a result, enrollments surged, creating the challenge of educating **more** students with **fewer** resources. You met that challenge with careful planning, creative problem-solving and old-fashioned elbow grease.

On behalf of all those Missouri families and kids, whose dreams you fulfilled, thank you for doing your job so well.

My second reason for calling you together is to let you know my expectations for 2012 and beyond. The presentations you heard this afternoon from Budget Director Linda Luebbering, Dr. Carol Twigg and Dewayne Matthews reflect some of my priorities, and provide context for my charge to you tonight. As Linda explained earlier, about $900 million of federal stabilization funds for Missouri will run out at the end of this fiscal year.

Even with the additional federal health care money that was just approved by Congress, we are looking at an overall budget gap in fiscal year 2012 of 400 to 500 million dollars.

Although we're starting to see an uptick in the economy - including six straight months of job growth - the pace of the recovery is expected to be slow.

And it certainly will not be robust enough to close the gap between revenue and expenses for at least a few more years.

Because of some tough decisions we made in Missouri over the past couple of years, we have not suffered the catastrophic problems experienced by other states from California to New York.

In the 20 months that I have been Governor, I have restricted or vetoed $1.5 billion in spending; eliminated twenty-five hundred positions; and reined in expenses across state government.

That fiscal discipline has paid off. We have kept our budget in balance and Missouri is the only state in the Midwest with a spotless Triple A credit rating from all three credit rating agencies.

Contrast that to our neighbor to the east. Illinois is buried in a 13 billion dollar budget hole, and the state owes its public colleges and universities more than a billion dollars.

But while Missouri is weathering the economic downturn better than many others, state revenue is expected to lag for some time.

That means that the potential cuts in FY 2012 across state government - including higher education - will be **substantial.**

Given these fiscal realities, I understand that tuition increases may be necessary at your institutions for the 2012 academic year. But at the same time, we need to acknowledge the financial strain that many Missouri families are experiencing. I know you share my concern about the rising cost of higher education, and the levels of debt that some students take on to pay for their education. Tuition increases must be reasonable, so that we can maintain the quality education our students deserve, at a price their families can afford. Any tuition changes must follow the guidelines set by Missouri's Higher Education Student Funding Act.

I also want to share with you what I believe Missouri's institutions of higher education need to accomplish **now** to stand us in good stead for the future.

Missouri has a proud history of leadership in higher education - both public and private. St. Louis University, founded in 1818, is the oldest university west of the Mississippi.

The University of Missouri, founded in 1839, is the first public university west of the Mississippi.

Today, Missouri is one of the few states that can claim two member institutions in the prestigious Association of American Universities. They are the University of Missouri at Columbia and Washington University in St. Louis.

I'd like to thank Chancellor Mark Wrighton for being with us this evening. Under his leadership, Washington University has become one of the most influential research institutions in the nation.

Missouri should be proud of Washington University's perennial ranking as one of the top American research universities.

Likewise, for its part, the University of Missouri ranked number 2 among all institutions in the Association of American Universities in the growth of federal research funding between 1995 and 2005. Like all of you here tonight, I am deeply committed to **strong public education**. I am a product of Missouri's public education system, as are all the members of my family. Today, higher education is at a crossroads - not just in Missouri - but across America. To survive and thrive, higher education must make fundamental changes in its business model, including how instruction is delivered, how degree programs are organized, and how remedial education is achieved.

The higher education agenda for Missouri must focus on ambitious goals that are attuned to the workforce needs and economic development opportunities of our state.

At the same time, our agenda will be tempered by the economic constraints under which we will continue to operate for some time.

Against this backdrop, I am calling on you to adopt an agenda focused on four key areas:
First: attainment;
Second: academic program review;
Third: cooperation and collaboration;
and Fourth: funding.

First, let's talk about attainment.
If Missouri's children are to keep pace with their peers around the world, we must dramatically ramp up the preparation we give them - from pre-school through graduate school.

While Missouri institutions of higher education must continue to enroll more students who are well-prepared to succeed in college, our sights must be focused on promoting attainment.

We want more students in our institutions with high aspirations - students who are deeply invested in learning, and who can help create a culture of excellence and achievement. And we want more students who will persevere all the way to the goal line, and complete their degrees. That is what attainment is all about.

Attainment should be rooted first in common core standards. Missouri must align its K-12 curriculum with college entrance standards in order to increase the likelihood that students graduating from high school will succeed at college.

I support, and Missouri has now adopted, the Common Core Standards. I expect us to move forward swiftly with their implementation.

These standards are rigorous and set high expectations. When more dedicated teachers in Missouri's classrooms implement them, more students will be up-to-speed and prepared for college.

In addition, we need to make sure more students in 2- and 4-year colleges and universities stay in school, make steady progress toward graduation, and earn their degrees. Currently, only about 37 percent of the young adults in Missouri hold a post-secondary degree.

That puts us slightly below average among our Midwestern peers.

Earlier today, you heard Dewayne Matthews talk about Lumina's "Big Goal" of 60 percent by two thousand twenty five.

Similar goals are being set by business and industry and, most recently, by the National Governor's Association with its "Complete to Compete" agenda.

If Missouri expects to compete in a global economy, we can - and we must - do better.

Meeting the national goal of 60 percent by 2020 will take extraordinary determination and creativity by all of us.

Second: a statewide review of all academic programs.

In 2009, the number of new academic programs launched at our public institutions outpaced discontinued programs by a ratio of five to one. While some of these new programs were, no doubt, good additions, the pace of growth - especially in this economy - is simply unsustainable.

We must take a hard and unsentimental look at all academic programs, and cull those that are of low productivity, low priority, or duplicative.

We simply cannot afford the luxury of supporting programs that are not connected strategically to state needs and priorities.

Likewise, this is a time when we have to decide how best to focus institutional missions rather than expand them.

You've all heard the term "mission creep." The ambition for institutions to enlarge their missions is understandable, but it is just not viable in the long run.

I believe that the productivity of Missouri higher education will be strengthened by supporting institutions that deliver improved performance on clear, distinct missions, rather than by allowing institutional missions to "creep" in undisciplined ways.

At the same time we scrutinize programs that may not be sufficiently productive to continue, we need to identify areas where academic expansion makes sense strategically and financially.

The Missouri Department of Economic Development is working with a statewide team of leaders in education, business, and industry to create a 5-year-plan for economic growth.

I anticipate that this plan will recommend a number of academic areas - at two-year, four-year, and graduate levels - where Missouri must increase degree opportunities in order to prepare the workforce that will be essential for the state's economic success.

My support for Caring for Missourians and Training for Tomorrow - two programs created to meet industry-specific needs for a skilled workforce in life sciences and technology - are prime examples of the strategic investments that I know we will need to continue.

This academic review process is already underway at some of your institutions, and I appreciate the rigor you are bringing to this undertaking.

I have instructed the Missouri Department of Higher Education to collaborate closely with your institutions to develop and conduct a state-wide, systematic review of all degree programs at our public institutions.

This review will be informed and guided by existing policy, established by the Coordinating Board for Higher Education, which stipulates the minimum criteria for "critical mass" for degree programs.

I've also discussed the parameters of this review with David Russell and Mike Nietzel and have told them that I expect a report from CBHE to be submitted to me and the General Assembly by February first of 2011.

Third: Increased cooperation and collaboration.

This initiative has two facets: administrative and academic.

Let's talk about the easier one first.

Administrative efficiencies.

I want each of your institutions to prepare a list of administrative services that could be provided more cheaply and efficiently through outsourcing, shared delivery, or other means.

If there are more efficient and less expensive ways to run the business side of your institutions, you need to get those in place as soon as possible.

Sharing best practices will allow us to get more savings faster system-wide.

Now the harder one: **Academic programs**.

This will start with an inventory of existing **cooperative** and **collaborative** academic programs in all our state institutions.

Then we must take a critical and clear-eyed look at the performance of these academic programs, to see whether they are actually meeting the goals set for them when they were launched.

Following this, I want your recommendations on how best to expand, improve, or discontinue these collaborations in order to serve students better and meet academic goals.

I anticipate that your lists of collaborative programs will be lengthy, and may pleasantly surprise a lot of people. Because, candidly, your institutions have been too modest about the strides you have already taken in this area; share the good news.

Still, there is much more that can be and needs to be done. For example:

Sharing faculty;

Expanding the use of early college opportunities, like dual credit and Advanced Placement;

One-year associate degrees and three-year bachelor's degrees;

Statewide virtual or on-line delivery of selected degree programs;

Shared or consolidated low-enrollment degree programs across multiple institutions;

Shared libraries; equipment and core research facilities.

Earlier today you heard from Carol Twigg. Her pioneering work on course redesign resulted in both improved student performance and cost savings when it was implemented at UMSL, the University of Iowa, Virginia Tech, Carnegie Mellon, and a large number of community colleges across the nation.

I think it has great potential, and should be studied carefully for possible applications across Missouri.

And finally, number four, funding. We need a robust and realistic discussion of how we plan to fund higher education going forward.

Our institutions need a multi-year, sustainable funding model that strikes the right balance among state budget appropriations, tuition and cost reductions.

That will make your budgeting process less crisis-driven, and your funding levels more predictable.

As part of this discussion, we must begin to consider the revised funding formula that many of you were involved in developing, which was approved by CBHE in 2008.

I understand that this funding model prioritizes three components:

1. A new approach to **core** funding;
2. Strategic initiatives, such as Caring for Missourians; and
3. Performance funding.

This model departed from the business as usual approach of across-the-board funding changes. No doubt, in light of the major economic changes we have experienced, it will need a second look and possible revision. For example, I believe it needs to put more emphasis on specific institutional missions and performance and less on existing costs.

In our rapidly changing society, on our ever-shrinking planet, education is a high-stakes enterprise. We are competing in a global marketplace of ideas and goods.

The jobs and industries of the future will demand more highly skilled workers than ever before.

Already, Missouri continues to see steady growth in the number of jobs requiring a bachelor's degree or better in science and technology. We cannot afford to fall behind other states - and other nations - in the number of degreed students who are ready to work in these key sectors of our economy.

Quite simply, the future demands that we deliver a smart, sustainable and forward-looking public agenda for higher education. When you leave here tonight, I want you to know that I am fully committed to working with you - and with the Legislature - to find solutions that will serve your institutions well in the short run, and strengthen higher education in our state for many years to come.

I am an optimist by nature; always have been, always will be. But my optimism isn't unfounded.

It's based in my confidence in you. You were called to this summit because you're the A-team. There is no group anywhere who knows more, or cares more, about higher education than you do.

Each one of you brings experience and ideas that are invaluable to this critical endeavor. Whether you are a college president, a provost, an administrator or a board member, your knowledge and insight will make this partnership a success.

We have our work cut out for us. Some of these initiatives can begin almost immediately; others will take more planning and time. Because I want to stay well-informed about your progress, I am instructing the Coordinating Board of Higher Education to provide me with monthly updates on the process and implementation of the four key areas I have identified tonight.

I will rely on David Russell and Mike Nietzel to brief me about these status reports, and I expect to see significant progress in each area over the next year.

You won't be on your own.

This is partnership in every sense of the word. I will bring to bear all the resources of my office, my administration, legislators, the business community and the state as a whole to inform this process and make real progress.

Because when we look back at this summit, I want it to mark a turning point, a defining moment.

Yes, I want it to be remembered as the time Missouri's leaders in higher education met serious fiscal challenges with discipline and ingenuity. But I also want it to be the moment when the leaders in higher education took to heart the old adage: "Fortune befriends the bold."

This is the time for **bold** thinking and **bold** action.

Tonight, I am giving you a **bold** new charge.

We must ensure that missions of Missouri's colleges and universities are focused, and that these institutions are driving forward to meet the changing needs of our students, our state and our world.

How well we carry out that mission will determine how well-prepared Missouri students are to compete for the jobs of the 21st Century... and to become successful community leaders and global citizens.

I have great confidence in your ability to meet and surmount the challenges that lie ahead of us, and I look forward to a strong and productive partnership.

Appendix B: CBHE statutory authority for program review

Missouri Revised Statutes

Chapter 173
Department of Higher Education

Section 173.005(7) CBHE statutory responsibility to collect the necessary information and develop comparable data for all institutions of higher education in the state . . .

Section 173.020(4) CBHE statutory responsibility for designing a coordinated plan for higher education in the state...

Section 173.030(2) CBHE statutory responsibility for recommending to governing boards of any institutions in the state the development, consolidation, or elimination of programs, degree offerings, physical facilities or policy changes where that action is deemed . . . in the best interests of the institution . . . and or the general requirements of the state.

Appendix C: CBHE Policy on Academic Program Review

III. B. 2. Academic Programs Review Policies

Existing Program Review

In 1983 the Coordinating Board for Higher Education directed its staff and the state's public institutions of higher education to initiate a systematic review of academic programs. The statewide review has resulted in a two-tier process: (1) a review by each four-year public institution of approximately 20 percent of its programs over a five-year cycle; and (2) state-level reviews of selected program areas as needed. The former process has been labeled campus-based reviews to distinguish it from review efforts that involve a statewide effort for a particular set of disciplines.

State Level Review (Adopted by the board September 10, 1983)

Criteria for State Level Instructional Program Review
The criteria for state level review are:
- Contribution of Program to Institutional Mission
- Statewide Needs
- Access
- Program Expenditures

Contribution to Institutional Mission
The extent to which a program relates directly to the institution's mission and role in the state system of higher education is particularly important in state level review. The diversity of the institutions according to mission suggests different objectives among similar kinds of programs as well as different funding needs.

An important public policy goal of the Coordinating Board is to encourage differential missions for institutions and that includes differential standards for qualitative performance. Thus, the quality criterion is combined with the contribution to mission criterion for the purposes of state level review.

Statewide Needs
In statewide planning there are two kinds of instructional needs to consider: (1) the enrollment demands of students; and, (2) the overall market demand for educated persons. The two kinds of instructional needs may at times be different; they may even be in conflict with each other. In addition, there are other needs to determine. What are the research needs of the state, and how are those needs related to instructional programs? What are the public service needs? What are the student aid needs? These cannot be considered entirely apart from instructional needs.

Access
The differences in mission and purpose between institutions should permit access to students of varying abilities, interests, and career goals. The availability of instructional programs within the state and bordering states and financial access for Missouri citizens are the

major statewide access concerns. Articulation between programs and institutions is a particularly important access issue at the state level.

Program Expenditures

The Coordinating Board's responsibility to recommend state general revenue support for instruction, research, public service, student aid, and institutional support is made in light of expenditure levels, the state's needs, and institutional pricing factors. Because state level program review must be accomplished within the context of statewide needs, one necessary data element is that of expenditure analysis of programs in terms of the distinctive role of a public college or university in the state system of higher education. The efficient use of state resources requires an analysis of instructional programs in the context of their congruence with institutional mission, and productivity

3. Criteria for Degree Programs

(Adopted by the board December 10, 1992; reaffirmed April 18, 1996)

Degree programs (i.e., majors) offered by Missouri's public institutions shall, at a minimum, satisfy the following criteria:

- Demonstrate centrality to the sponsoring institution's mission.

- Provide objective evidence of success in addressing statewide needs and/or contributing toward the attainment of statewide goals.

- Maintain a critical mass of majors and graduate annually an average, calculated over the prior three years, of at least 10 majors at the associate or baccalaureate degree level, 5 majors at the master's degree level, and 3 majors at the doctoral degree level, unless there is sufficient justification for exceptions, particularly in the arts and sciences.

- Regularly produce highly qualified graduates as demonstrated in the following areas:
    - Performance on assessments of general education, including measures of oral and written communication skills and critical thinking;
    - Performance on nationally normed tests, licensure or certification examinations, and/or other measures of achievement in the major;
    - Average placement rates of those seeking employment which take into account general economic conditions;
    - Alumni and employer satisfaction rates

Appendix D: MDHE methodology for special statewide academic program review

Four-Year Sector

1. Programs will be reviewed according to their Classification of Instructional Program (CIP) number. In most cases the four-digit CIP number will be the appropriate level of analysis, but some programs will have to be reviewed at the six-digit level.

2. Baccalaureate programs that have not graduated an average of 10 students over the three previous years, master's programs that have not graduated an average of five students over the three previous years, and doctoral programs that have not graduated an average of three students over the three previous years will be flagged for further review by the MDHE. These thresholds had been identified previously by the CBHE as minimum levels of productivity and written into board policy.

3. Certificate programs will not be included in this review, but will be included in the final report to highlight their contributions as a no-cost means of preparing students for the workforce.

4. MDHE will identify and send to each institution a preliminary list of programs that appear to be below the appropriate thresholds. The institutions will review the list to verify the accuracy of the MDHE's data and to identify programs not on the MDHE list. MDHE staff will work with the institutions to reconcile the data to obtain an accurate list of programs for further review.

5. After this process of reconciliation is complete, the MDHE will provide each institution with an official list of programs that are below the productivity thresholds and flagged for further review, including a separate list of programs that do not meet the productivity thresholds at the six-digit CIP level. The institutions will use an MDHE-designed electronic form to respond to each flagged program and indicate what action they intended to take. (See Attachment A)

6. MDHE staff will review and assess the institutions' justifications for the action they intend to take for each program identified in the official list. MDHE staff will analyze the institutions' responses for maintaining a program based on data and documentation provided by the institutions and qualitative measures contained in existing CBHE policy.

7. The MDHE will provide to each institution a preliminary report of the department's initial review of each institution's proposed action. The institutions will have an opportunity to respond to this report and, if requested, provide additional data, documentation, and information to the MDHE for review.

Two-Year Sector

1. Programs will be reviewed according to their Classification of Instructional Program (CIP) number. In most cases the four-digit CIP number will be the appropriate level of analysis, but some programs will be reviewed at the six-digit level.

2. Associate of Arts programs that have not graduated an average of 10 students over the three previous years, and all Associate of Science, Associate of Applied Science, and Certificate programs that have not graduated an average of five students over the three previous years, will be flagged for further review.

3. MDHE will identify and send to each institution a preliminary list of programs that appear to be below the appropriate thresholds. The institutions will review the list to verify the accuracy of the MDHE's data and to identify programs not on the MDHE list. MDHE staff will work with the institutions to reconcile the data to obtain an accurate list of programs for further review.

4. The MDHE will send to each institution an official list of programs that did not meet the productivity thresholds and have been flagged for further review, including programs that did not meet the productivity thresholds at the six-digit CIP level. The institutions will use an MDHE-designed electronic form to respond to each flagged program and indicate what action they intended to take. (See Attachment B)

5. MDHE staff will review and assess the institutions' justifications for the action they intend to take for each program. MDHE staff will analyze the institutions' responses for maintaining a program based on data and documentation provided by the institutions and qualitative measures contained in existing CBHE policy.

6. The MDHE will provide to each institution a preliminary report of the department's initial review to each institution's proposed action. The institutions will have an opportunity to respond to this report and, if requested, provide additional data, documentation, and information to the MDHE for review.

Appendix E: MDHE Program Response Form, Four-Year Institutions

Missouri Department of Higher Education
EXISTING ACADEMIC PROGRAM REVIEW
REQUEST FOR PRODUCTIVITY INFORMATION AND JUSTIFICATIONS

4Y Page1

Program Inventory Name(s)	**Degree Designation (e.g. AA, BS, MA, PhD, etc.)**	**Date of Original Program Approval (MM/DD/YY)**

CIP Code(s) (######, no decimal)	**Degree Level Code and Name**	**Date of Last Internal Review (MM/DD/YY)**

CHECK ANY OF THE FOLLOWING TO DESCRIBE ACTION(S) THE INSTITUTION WILL TAKE CONCERNING THIS PROGRAM AND ATTACH REQUIRED DOCUMENTATION (X all that apply)

☐ **Program has been or will be voluntarily terminated** (submit copy of MDHE program deletion form or other official documentation that program elimination is in process)

☐ **MDHE data are inaccurate; program meets criteria/standards for productivity** (document discrepancy in data and identify source)

☐ **New program approved within the past five years and is exempt from program review process** (provide documentation with program initiation date)

☐ **Program is critical to mission and will be retained** (provide supporting documentation)

☐ **Program contains courses that support general education and/or other programs** (provide documentation to show how the low-productivity program supports other programs)

☐ **Program shares a substantial number of courses and faculty with other similar programs** (provide CIP codes for other programs and evidence of shared resources)

☐ **Student or employer demand, or demand for intellectual property is high and external funding will be jeopardized by program closure** (provide evidence and cite sources of demand or funding)

☐ **Program provides unique access to an underserved population or geographical area** (provide justification)

☐ **Program meets a unique need in the region, state, or nation** (provide justification)

☐ **Joint/consortium program in which combined number of graduates meets productivity standards** (provide copy of consortium agreement and enrollments in other programs)

☐ **Other** (e.g., development plan to increase completion rate with specific date for results; revenue-producing program; potential for collaborative program: program being put on inactive status; master's program in same discipline as a PhD with sufficient graduates, etc.)

☐ # of additional documents attached: (Use convention: initials_cipcode_deglevcode_doc#; e.g. UMC___1)

Provide sufficient context and describe pertinent factors and other special considerations as needed to justify the proposed action. Use separate attachment if necessary.

Appendix F: MDHE Program Response Form, Two-Year Institution

Missouri Department of Higher Education
EXISTING ACADEMIC PROGRAM REVIEW
REQUEST FOR PRODUCTIVITY INFORMATION AND JUSTIFICATIONS

2Y Page1

Program Inventory Name(s)

Degree Designation (e.g. AA, BS, MA, PhD, etc.)

Date of Original Program Approval (MM/DD/YY)

CIP Code(s) (######, no decimal)

Degree Level Code and Name

Date of Last Internal Review (MM/DD/YY)

CHECK ANY OF THE FOLLOWING TO DESCRIBE ACTION(S) THE INSTITUTION WILL TAKE CONCERNING THIS PROGRAM AND ATTACH REQUIRED DOCUMENTATION (X all that apply)

Program has been or will be voluntarily terminated (submit copy of MDHE program deletion form or other official documentation that program elimination is in process)

MDHE data are inaccurate; program meets criteria/standards for productivity (document discrepancy in data and identify source)

New program approved within the past five years and is exempt from program review process (provide documentation with program initiation date)

Program is critical to mission (provide supporting documentation)

Program contains courses that support general education and/or other programs (provide documentation to show how the low-productivity program supports other programs)

Cost-recovery based program for workforce development and/or specialized population (provide justification)

Program shares a substantial number of courses and faculty with other similar programs (provide CIP codes for other programs and evidence of shared resources)

Student or employer demand, or demand for intellectual property is high and external funding will be jeopardized by program closure (provide evidence and cite sources of demand or funding)

Program provides unique access to an underserved population or geographical area (provide justification)

Program meets a unique need in the region, state, or nation (provide justification)

Joint/consortium program in which combined number of graduates meets productivity standards (provide copy of consortium agreement and enrollments in other programs)

Other (e.g., development plan to increase completion rate with specific date for results; revenue-producing program; potential for collaborative program: program being put on inactive status; master's program in same discipline as a PhD with sufficient graduates, etc.)

#N/A

Provide sufficient context and describe pertinent factors and other special considerations as needed to justify the proposed action. Use separate attachment if necessary.

Appendix G: Program Review Feedback Instruments Instructions

Program Review List and Feedback Instrument Instructions

Below Threshold List

The list of programs with completions below the established threshold is based on the reconciliation of EMSAS completions and Program Inventory information provided by institutions in the prior round of analysis. Programs were aggregated at the 6-digit CIP level, regardless of award level. Also included are programs with no completions over the past three years of data reports. These were retained because it is difficult to determine whether these are new programs which have yet to generate completions, or if they are programs maintained in the MDHE Program Inventory which are no longer relevant and need to be deactivated or deleted from the inventory. Programs already identified as "new" during the reconciliation process have been excluded.

Some certificates and degrees "linked" by institutions as embedded may not have been listed together if they did not share the same CIP. If cross-CIP linkages exist, please indicate that on the program feedback response form.

Feedback Response Form

- Complete the institutional information tab
- Use the forms on the Survey tab. There are 50 blank forms available, page down to find the next blank one.
- Program Inventory name: List any Programs, as titled in the Program Inventory included in the 4-digit category
- CIP Code: List all 6-digit CIP codes associated with the category. Do not include decimal (e.g. 102014). A pull down menu is included for single CIPs. Overwrite for more than one.
- Degree Designation: List all degrees associated with the CIP and level (e.g. AA and AAT)
- Degree Level Code: Indicate the degree level for the program as shown on the Below Threshold List (pull down menu included)
- Date of original Program Approval: by MDHE
- Date of Last Internal Review: by institution
- Use the pull-down menu to check (X) all appropriate descriptions of institutional proposed actions related to each program on the Below Threshold List .
- Each of the responses requests additional documentation and justification. If these comments may be provided in a paragraph or less, please include them in the text box at the bottom of the page. If more extended documentation is required, attach the documentation to the same email as the feedback response workbook. Please use the following naming convention for the documentation: # of additional documents attached: initials_cipcode_deglevcode_doc#; (e.g. MSSU_0101_Pl_1).
- Indicate the number of documents for the CIP Form which are attached to the email